

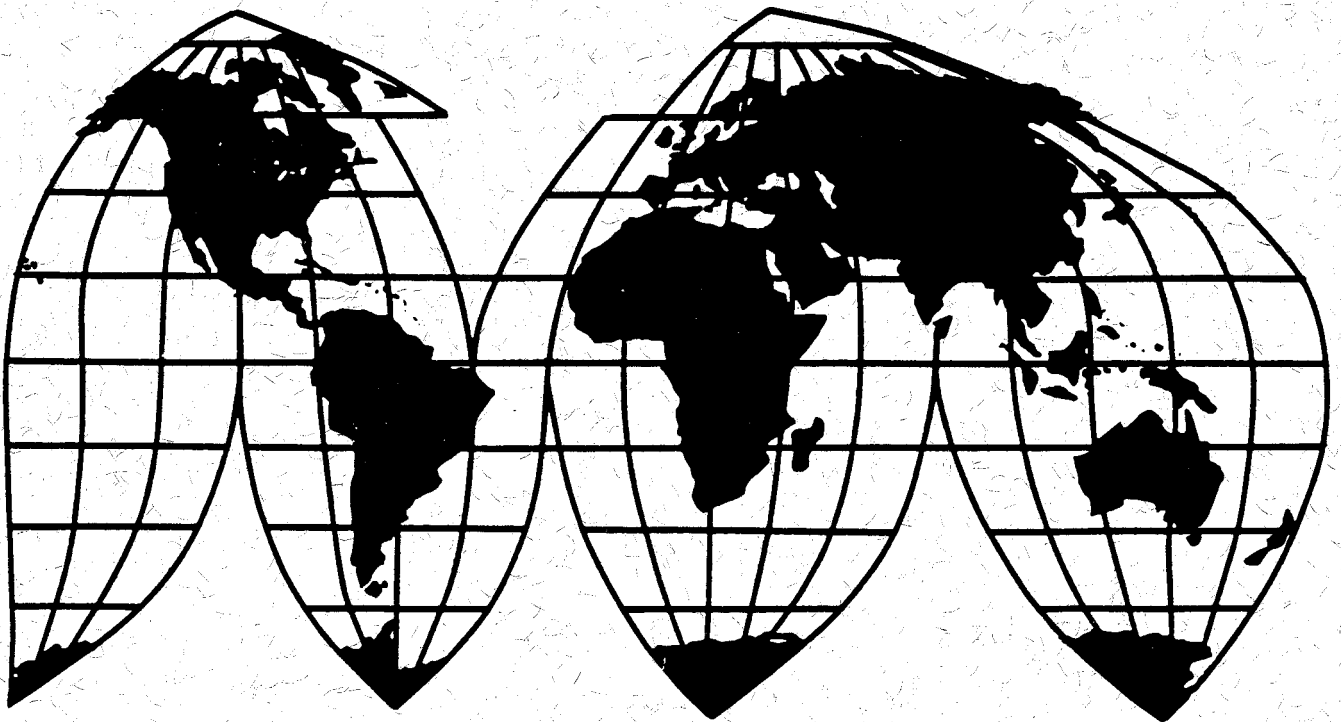
In the Matter of
**Certain Portable On-Car Disc Brake
Lathes and Components Thereof**

Investigation No. 337-TA-361

Publication 2889

May 1995

U.S. International Trade Commission



U.S. International Trade Commission

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CERTAIN PORTABLE ON-CAR DISC BRAKE LATHES)
AND COMPONENTS THEREOF)
)

Investigation No. 337-TA-361

NOTICE OF COMMISSION DETERMINATION NOT TO REVIEW
AN INITIAL DETERMINATION ISSUED ON REMAND; DETERMINATION
OF NO VIOLATION OF SECTION 337 OF THE TARIFF ACT OF 1930

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review the initial determination (ID) issued on November 28, 1994, by the presiding administrative law judge (ALJ) after remand by the Commission in the above-captioned investigation, thereby finding that there is no violation of section 337 of the Tariff Act of 1930 in the investigation.

FOR FURTHER INFORMATION CONTACT: Shara L. Aranoff, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3090. Copies of the non-confidential version of the ID and all other nonconfidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone 202-205-2000. Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

SUPPLEMENTARY INFORMATION: On November 24, 1993, the Commission instituted an investigation of a complaint filed by Pro-Cut International, Inc. ("Pro-Cut") under section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337). The complaint alleged that two respondents imported, sold for importation, or sold in the United States after importation certain portable on-car disc brake lathes and components thereof that infringed the sole claim of U.S. Letters Patent 4,226,146 ("the '146 patent"). The Commission's notice of investigation named as respondents Hunter Engineering Company ("Hunter") and Ludwig Hunger Maschinenfabrik GmbH ("Hunger"), each of which was alleged to have committed one or more unfair acts in the importation or sale of portable on-car disc brake lathes that infringe the asserted patent claim.

The ALJ conducted an evidentiary hearing on May 2-4, 1994, and issued his final ID on August 12, 1994. He found that: (1) respondents' imported product does not infringe the asserted patent claim; (2) complainant satisfied the

economic requirements for existence of a domestic industry; but that (3) there is no domestic industry because complainant is not practicing the '146 patent. Based upon his findings of no infringement and no domestic industry, the ALJ concluded that there was no violation of section 337.

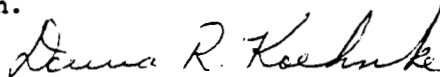
On September 29, 1994, the Commission determined to review the August 12 final ID and to remand the ID in part to the ALJ for further explanation of his findings of no infringement under the doctrine of equivalents and no domestic industry. The Commission ordered the ALJ to issue an ID on the remanded issues on or before November 28, 1994. The Commission adopted the August 12 final ID in all other respects.

On November 28, 1994, the ALJ issued an ID addressing the remanded issues. The remand ID provides additional findings of fact and analysis and reiterates the ALJ's prior findings of no infringement under the doctrine of equivalents and no domestic industry. Complainant filed a petition for review objecting to both findings of the remand ID. Both respondents and the Commission investigative attorneys filed oppositions to the petition for review supporting the ALJ's findings in the remand ID. No agency comments were received.

Having considered the record in this investigation, including the August 12 final ID, the November 28 remand ID, and all submissions filed in connection with the petitions for review of both IDs, the Commission determined not to review the November 28 remand ID.

This action is taken under the authority of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, and sections 210.53 of the Commission's Interim Rules of Practice and Procedure, 19 C.F.R. § 210.53.

By order of the Commission.



Donna R. Koehnke
Secretary

Issued: January 10, 1995

PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

PUBLIC INSPECTION

In the Matter Of

Certain Portable On-Car
Disc Brake Lathes And
Components Thereof

Investigation No. 337-TA-361

Initial Determination

Paul J. Luckern, Administrative Law Judge

Pursuant to the September 29, 1994, "Notice of Commission Determination To Review and Remand To the Presiding Administrative Law Judge Certain Portions Of An Initial Determination Terminating The Investigation On the Basis Of A Finding Of No Violation Of Section 337, And To Designate The Investigation More Complicated" directing issuance of an initial determination addressing certain remanded questions, this is the administrative law judge's initial determination pursuant to said notice.

95 IIR 29 P5:06

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ADMINISTRATIVE
LAW JUDGE
U.S. INTERNATIONAL TRADE COMMISSION

The Commission, in an order (9/29/94 order), attached to its notice ordered the following:

2. On or before November 28, 1994, the ALJ shall issue an ID addressing the following remanded questions:

- a. Whether the accused device performs substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - b. Whether the accused device operates in substantially the same way as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - c. Whether the accused device achieves substantially the same result as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - d. To what scope of equivalents is the '146 patent entitled?
 - e. Whether, in light of questions a-d raised above, the domestic industry is practicing the '146 patent under the doctrine of equivalents?
3. The ALJ shall make specific factual findings with respect to each remanded question, indicate what record evidence supports those findings, and provide an analysis of his ultimate determination on each issue.
4. The subject ID ^[1] is adopted by the Commission in all other respects.

Responses from the parties, pursuant to Order No. 44, on the above questions have been received.

Question 2a.

Addressing "question 2a," the accused device does not perform substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent.

¹ The "subject ID" is the final initial determination which issued on August 12, 1994 (8/12/ID) and which found no violation.

A. Specific Factual Findings In Support

224.² Claim 1 (the only claim) of the '146 patent reads as follows:

A portable lathe device, intended primarily for returning of brake discs and comprising a portable driving device including a drive member and a clutch device connected with said drive member, said clutch device incorporating a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned, said centering device comprising a rotatable disc for mounting to the brake disc, guiding means for aligning the rotatable disc with brake disc and clamping means for locking the rotatable disc and the brake disc in aligned position, means for attaching said clutch device to a brake disc for rotation of the disc when still mounted on a wheel shaft and from which brake disc the wheel has been dismantled, a tool holder adjacent the driving device and provided with feed means, means for attaching said tool holder to the mounting points for a dismantled brake yoke, said tool holder including two individually adjustable lathe tools intended one for each side of the brake disc and said tool holder being moveable radially relative to the brake disc and a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit.

(CX 2, Col. 4:9-31) (emphasis added).

[FF 29 of 8/12/94 ID]

² Findings of fact numbers 1 through 223 were contained in the 8/12/94 ID. The numbers of the findings of fact set forth herein continue with the next consecutive number, viz. FF 224. For the convenience of the Commission applicable findings of the 8/12/94 ID are duplicated in this initial determination.

225. The '146 patent (CX 2), refers to two embodiments, viz. FIG. 1 and FIG. 2, as shown below:

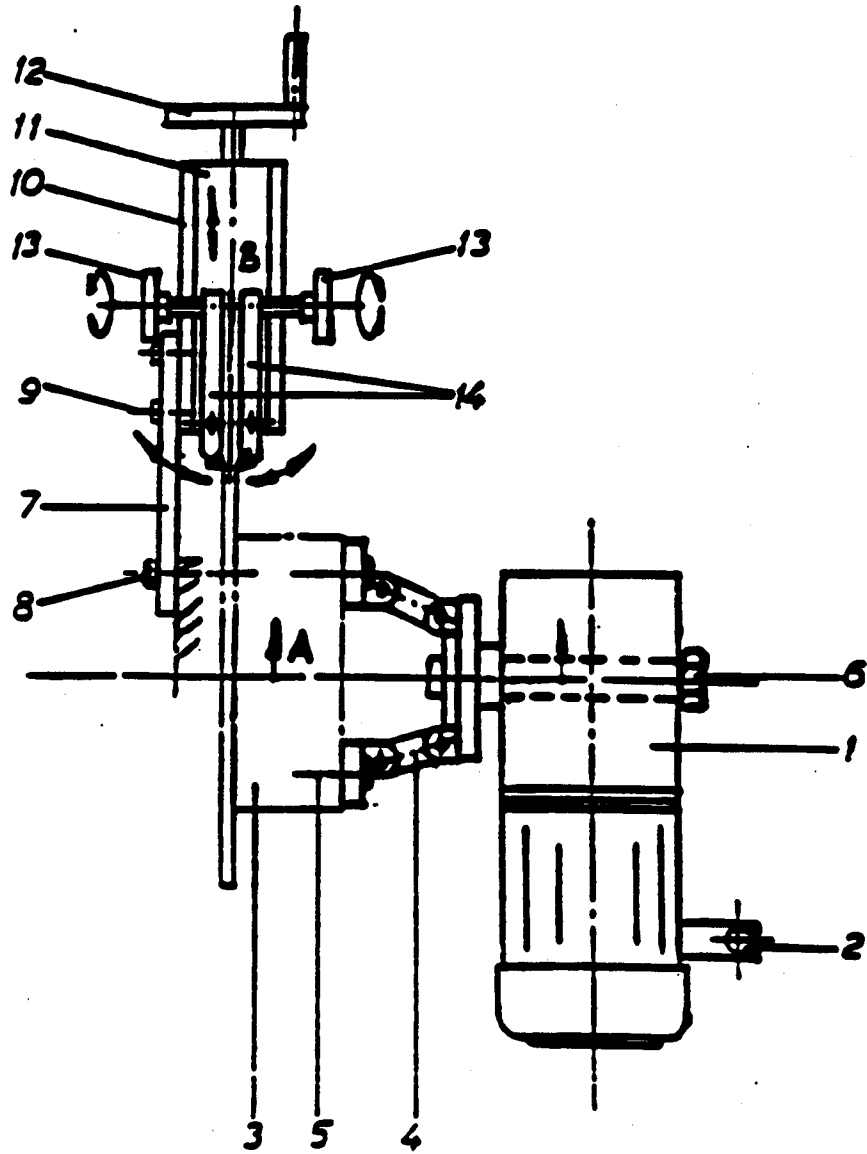


FIG. 1

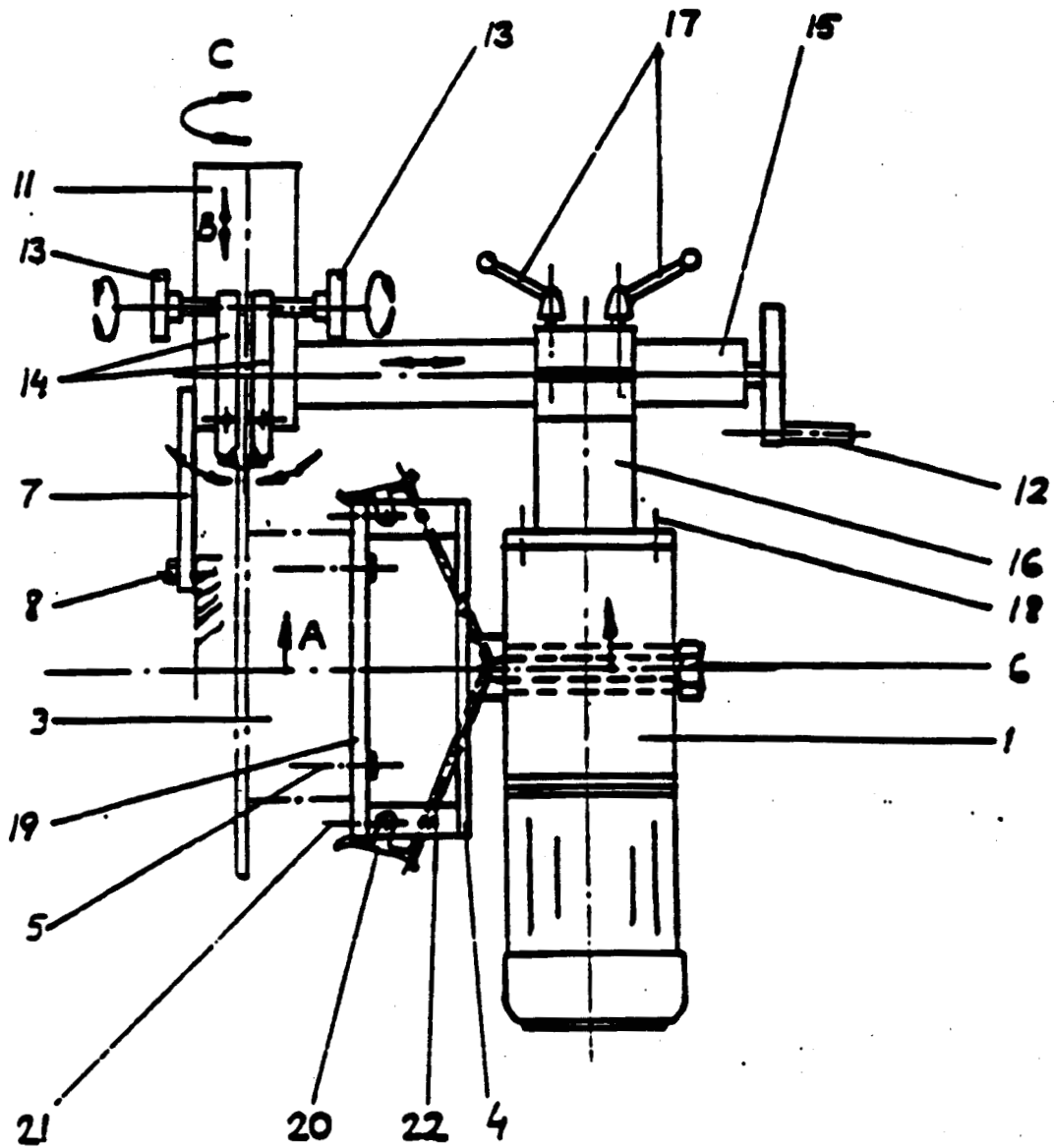


FIG 2

226. The '146 patent claim 1 is directed by its terms to a one piece on-car brake lathe as shown in FIG. 2 (CX 2) (see FF 225).

227. The '146 patent, under the heading DESCRIPTION OF SOME PREFERRED EMBODIMENTS, and referring to the FIG. 1 embodiment, states:

The lathe device according to the invention shown in FIG. 1 incorporates a driving device 1, which for instance can be an electric motor provided with a worm transmission. The motor is prevented from rotating by means of a supporting post 2 and it is adapted via a clutch to drive the brake disc 3, which is still mounted on the wheel shaft, in the direction shown by arrow A. The clutch device 4 is connected to the brake disc by means of a screw joint 5 fitted in the brake disc bores or guide spindles intended for attachment of the wheel hub with its tire to the brake disc.

The brake yoke with the brake shoes and the brake pistons have been dismantled from the wheel and an attachment arm 7 has thereupon by means of bolts 8 been fixed in the bores intended for fitting of the brake yoke. The attachment arm 7 is via bolts 9 attached to a tool holder incorporating a bottom plate 10 provided with guides along which a carrying plate 11, which carries lathe tools 14 is displaceable in the direction of arrow B. The carrying plate motion is effected manually via a hand wheel 12 and a transmission. The lathe tools 14, one for each side of the brake disc, are both individually laterally adjustable by means of one adjustment screw 13 each. The bottom plate 10 can be mounted in right hand or left hand positions relative to the attachment arm 7 to be able to be used for reconditioning of brake discs situated at any side of the vehicle.

(CX 2, col. 1, lines 64-68, col. 2, lines 1-23) (emphasis added).

[FF 33 of 8/12/94 ID]

228. Referring to the FIG. 2 embodiment, the '146 patent states in part:

In FIG. 2 is thus shown a driving device 1, which is prevented from rotating. The brake disc 3 is driven in the direction A by the driving device 1, which e.g. can be a worm transmission motor or the like through the intermediary of a clutch device 4 designed as a

mounting plate fixed to the fitting bores or the guide spindles of the brake disc intended in normal operation to receive a wheel hub with tire by means of a screw joint 5. One end of an attachment arm 7 is by means of bolts 8 attached to the bores for the brake yoke, whereas the opposite end of the attachment arm is fixed so one end of a supporting arm 15, which at its end situated nearest to the attachment arm 7 supports the carrying plate 11. ... The clutch device 4 in this embodiment incorporates a mounting plate 19, which is fitted to the brake disc by means of screws or nuts 5 in the holes for the rim bolts. The clutch device furthermore incorporates a number of guiding pins and clamping shoulders 20, which are fitted to the mounting plate 19 by means of suitable members at 21 and these clamping shoulders 30 are adapted to lock the mounting plate when locking bars 22 are acted upon when the center screw 6 is tightened.

(CX 2, col. 2, lines 28 to 42, 61 to 68, col. 3, lines 1-2) (emphasis added).

[FF 34 of 8/12/94 ID]

229. Referring to both embodiments FIG. 1 and FIG. 2, the '146 patent discloses:

Both embodiments of the portable lathe device shown in FIGS. 1 and 2 work mainly in the same manner and give the same advantages. After the vehicle, on which the brake discs shall be re-turned, has been blocked up and wheel and brake yoke with brake shoes and brake pistons have been dismantled the attachment arm 7 is fitted to the bores for the brake yoke. The clutch device 4 is centered and fixed to the brake disc by means of the fitting member 5 and the carrying plate 11 of the tool holder is adjusted to its correct position in relation to the brake disc, whereupon the lathe tools 14 are individually adjusted by means of the hand wheels 13 to accurate turning positions. The driving motor 1 is thereupon started and it rotates the brake disc via the built in gear. The lathe tools 14 are immobile except for their adjustment possibilities, sideways and in the feed direction shown by arrows B. The feed of the lathe tools in the radial direction of the brake disc is effected by means of manual maneuvering on the hand wheel 12, but it is also possible to connect this hand wheel to an air driven, slowly rotating drilling machine or the like for obtaining a more even lathe tools feed. In the embodiment according to FIG. 2 the attachment arm 7 is furthermore intended to ascertain that the

driving motor does not start to rotate and it thereby takes over the function of the supporting post 2 at embodiment according to FIG. 1.

(CX 2, col. 3, lines 9 to 32, col. 4, lines 1 to 3) (emphasis added).

[FF 35 of 8/12/94 ID]

230. Complainant's expert, Dr. David M. Parks, is a professor of mechanical engineering at the Massachusetts Institute of Technology. (Parks, CX 194, Ans. 3). Parks works in the area of fracture mechanics, plasticity and finite element analysis. (Parks, CX 194, Exh. 1).

[FF 7 of 8/12/94 ID]

231. Prior to joining MIT, Parks was an Assistant Professor of Engineering at Yale University. (Parks, CX 201 at 1).

[FF 8 of 8/12/94 ID]

232. Parks was graduated from the University of Illinois in 1971 with a Bachelor of Science degree in Engineering Mechanics. He received a Master of Science degree in Engineering from Brown University in 1973 and a Ph.D. degree in Engineering from Brown University in 1975. (Parks, CX 194 at 1).

[FF 9 of 8/12/94 ID]

233. Parks was qualified as an expert in engineering mechanics and mechanical engineering. (Tr. at 262).

[FF 10 of 8/12/94 ID]

234. Respondents' expert, Dr. James Kirk, is a professor of mechanical engineering at the University of Maryland and has taught at said university since 1972. (RX 2A). Kirk worked as a development engineer for the Ford Motor Company in 1966 and 1967 and has been a member of the Society of Automotive Engineers since 1980. (RX 2A).

[FF 11 of 8/12/94 ID]

235. Kirk was graduated from Ohio University in 1967 with a Bachelor of Science degree in Electrical Engineering. He received, from M.I.T., a Master of Science degree in mechanical engineering in 1969 and a Doctor of Science degree in mechanical engineering in 1972.

[FF 12 of 8/12/94 ID]

236. Kirk considers himself to have greater knowledge than one of ordinary skill in the art. (Kirk, Tr. at 322, 323).

[FF 13 of 8/12/94 ID]

237. Kirk was qualified as an expert in mechanical engineering, manufacturing and general automotive engineering. (Tr. at 301, 305, 310).

[FF 14 of 8/12/94 ID]

238. Joseph Willey is the President of Complainant Pro-Cut. (Willey, Tr. at 92, 93, 2; Willey, CX 196 at 1).

[FF 15 of 8/12/94 ID]

239. Willey is also one of the owners of Pro-Cut along with Paul Hooper and Lorin Dore. (Willey, CX 196 at 1).

[FF 16 of 8/12/94 ID]

240. Willey, manages the day-to-day operations of Pro-Cut International, makes sales calls on large customers, handles customer relations, and manages production to insure that the operation runs smoothly. (Willey, CX 196 at 1).

[FF 17 of 8/12/94 ID]

241. Willey has had extensive education in the use of portable brake lathe equipment. (Willey, Tr. at 88).

[FF 18 of 8/12/94 ID]

242. Willey is intimately familiar with the structure and operation of

the Pro-Cut on-car brake lathe. (Willey, CX 196, at 6).

[FF 19 of 8/12/94 ID]

243. Paul Hooper, who is an officer of complainant worked as an automobile mechanic for 25 years. (Willey, Tr. at 193).

[FF 20 of 8/12/94 ID]

244. Hooper trained Hunter's engineers with respect to the operation of the Pro-Cut on-car brake lathe. (Hooper, Tr. at 194, 195).

[FF 21 of 8/12/94 ID]

245. Hooper is familiar with the accused brake device marked as CPX 5. (Hooper, Tr. at 216).

[FF 22 of 8/12/94 ID]

246. Hooper has been actively working with the Pro-Cut on-car brake lathe for about five to six years. (Hooper, Tr. at 249; Hooper, CX 192, at 1).

[FF 23 of 8/12/94 ID]

247. In addition to being an owner of Pro-Cut, Mr. Hooper is a Vice President and travels around the country making sales calls on large national accounts like Sears, Wards, and General Motors. (Hooper, CX 192, at 1).

[FF 22 of 8/12/94 ID]

248. Parks, on the last page of his witness statement (CX 194, Exhibit 3), in comparing item (i) and item (l) of the claim in issue with the accused device, states:

Claim 1

(i) means for attaching said tool holder to the mounting points for dismantled brake yoke,

Accused Device

means for attaching the tool holder to a brake is provided through the unitary connecting arm (3) and the mounting of the device to the brake assembly through disc (50), and through support stand (60) and anti-

rotation post (21),

* * *

(1) a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit.

a supporting arm (3) rigidly connects the tool holder assembly to the portable motor unit to form an integral portable unit.

Thereafter Parks testified at the hearing, with respect to what he said above as to the accused device and item (1):

A I would perhaps -- I think it probably a better reading -- to make it clearer in the context might be to say "or" antirotation post 21. That word might make it more clear.

But I meant that "and" in the sense that -- that both of them -- A and B -- that is, the support stand 60 and the antirotation post 21 serve the antirotation function. So perhaps the wording is not optimal, but that was the meaning.

JUDGE LUCKERN: But let me make sure I understand you. What you say right now is that the line that says "(60) and antirotation post" -- based on what you just said now, perhaps a better way would be (60) or antirotation post"?

THE WITNESS: I think that perhaps that would be a more -- a clearer wording that would convey the sense that either the support stand or the antirotation post provide the function of suppressing rotation.

JUDGE LUCKERN: All right.

THE WITNESS: So they are not both required.

(Parks, Tr. at 286-87).

[FF 148 of 8/12/94 ID]

249. With respect to the preceding finding Parks made reference to the following drawings of the accused device (CPX 5, RPX 7) with the circled references being to numbered parts in the accused device (CX 194, Exhibit 3):

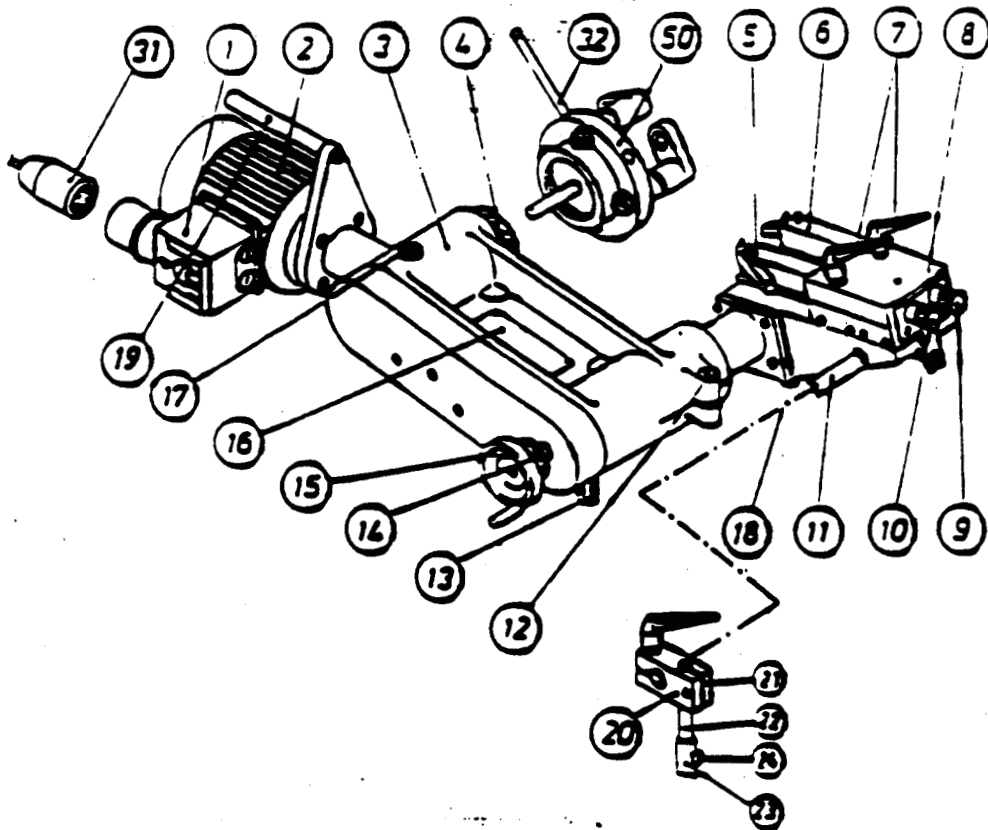
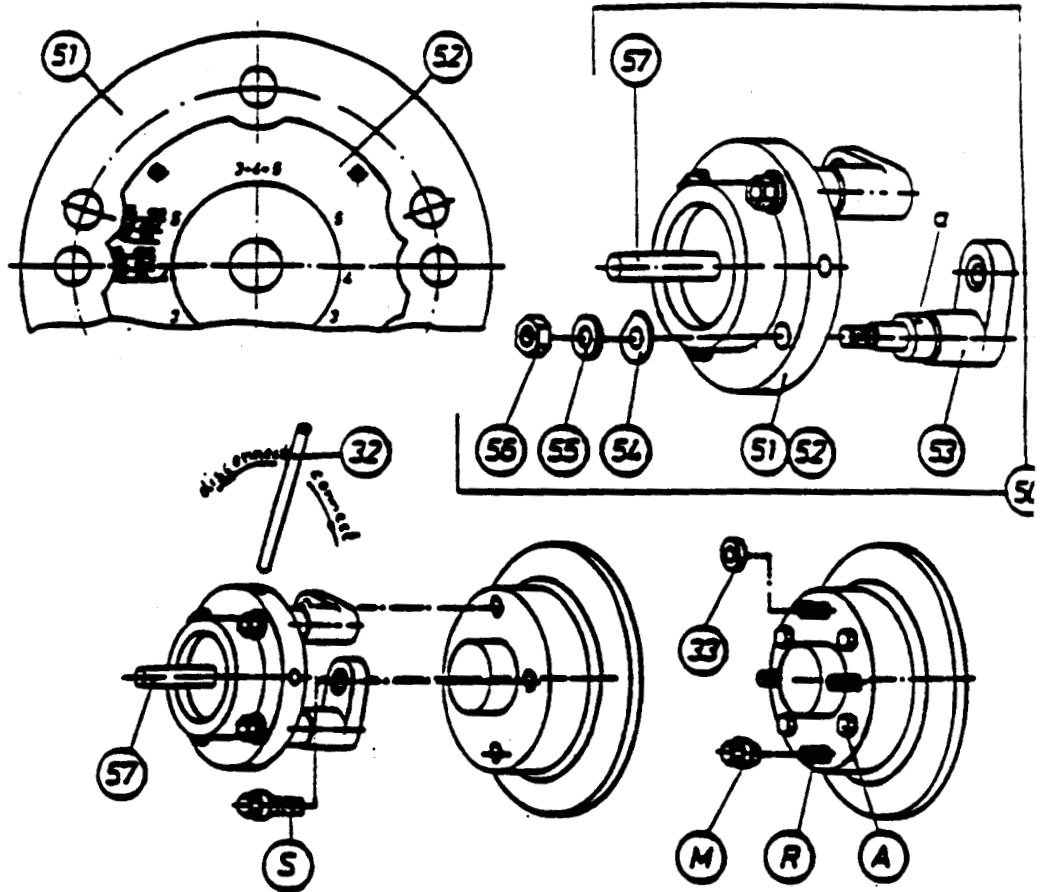


Exhibit 3

Type E 3266

5. MOUNTING THE MACHINE ON THE VEHICLE

5.1 UNIVERSAL MOUNTING FLANGE



Item	Description
50	Universal mounting flange Part no. 326.17.120
51	Centering plate
52	Graduated dial
53	Centering crane
54	Disc spring
55	Washer
56	Hexagon nut
57	Loading pin

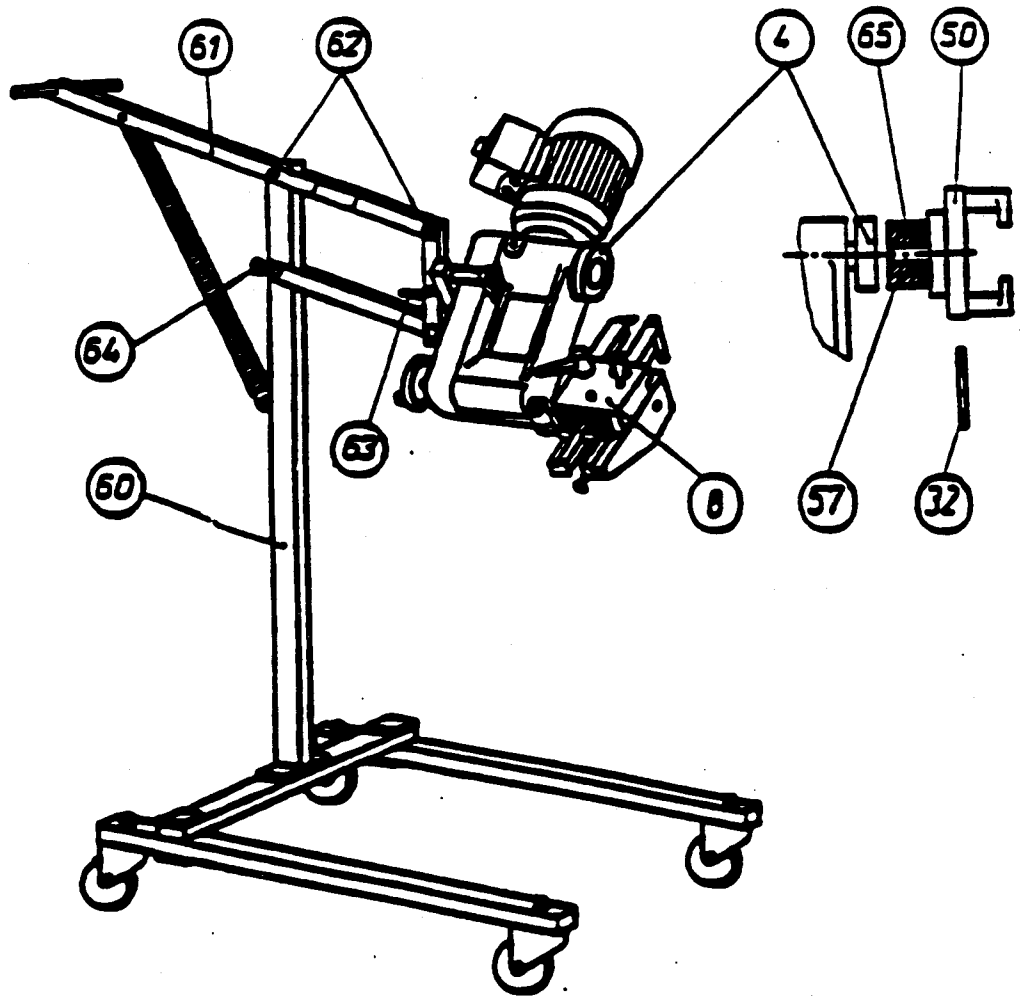
Item	Description
32	Tommy bar (standard accessory) Part no. 326.10.110.01
33	5 Spacing washers (standard accessory) Part no. 326.10.110.02
M	Wheel nut
R	Wheel stud
S	Wheel bolt

[77 149 of 8/12/94 ID]

OPERATING INSTRUCTIONS
Type E 326a

5. MOUNTING OF THE MACHINE ON THE VEHICLE

5.5 MOUNTING WITH TURNING SCHELLEY



250. The full attachment function made between the tool holder and the spindle is accomplished through the body of the lathe and the clutch adaptor, in conjunction with an anti-rotation element. (Parks, Tr. at 282).

251. The tool holder of complainant's on-car brake lathe is attached to the lathe body (Hooper, Tr. at 254).

[FF 99 of 8/12/94 ID]

252. The lathe body [of complainant's domestic brake lathe] is attached to the clutch adapter (Hopper, Tr. at 254).

[FF 97 of 8/12/94 ID]

253. The clutch adapter of the accused device is bolted to the studs that are on the bearing hub or on the rotor that is attached directly to the spindle because the studs that go through the rotor and/or hub are part of the spindle (Willey Tr. at 149, 159; Hooper Tr. at 253, 254; Kirk Tr. at 338).

[FF 84 of 8/12/94]

254. The clutch adapter in the accused on-car brake lathe is directly connected to the spindle (Willey, Tr. at 157, 158).

[FF 10 of 8/12/94 ID]

255. The mounting bores ("holes") for a dismantled brake yoke ("brake caliper") are located on the spindle (CX 194, Exh. 2; Willey, Tr. at 149).

256. Complainant's Willey testified:

Q Is there a means for attaching points A to points B on any of the three devices [accused and domestic devices] A being the tool holder, B being the mounting -- literally the mounting holes of a dismantled brake yoke?

* * *

THE WITNESS: Again, I guess I have to use that word means again. The point is the means -- yes, with a normal shop tool, the points have been given you to do it and you can use a shop tool, which is simply any

tool that has a vice grip on both ends and you could stop the rotation.

JUDGE LUCKERN: Is there such a shop tool there, though, in connection with the Hunter devices which I'll be forming, which --

THE WITNESS: Well, it would be in most mechanic's boxes, sir.

JUDGE LUCKERN: But it's --

THE WITNESS: It's a common mechanical tool that is not provided with the lathe.

JUDGE LUCKERN: But for example, you don't see it there in connection with CPX-5 or RPX-7 [Respondents' lathe] correct?

THE WITNESS: No, sir.

(Willey, Tr. at 180, 181).

257. Exhibit 2 to CX 194, reproduced below, is a photographic depiction of a wheel mounting bracket including brake caliper mounts and a disc brake rotor including studs for lug nuts which is journaled directly upon the shaft mounting assembly which structure is illustrative of the disc brake and mounting bracket for a Ford Mustang. While other designs are used by various manufactures these are the two basic components which comprise a brake disc and wheel mounting assembly which is connected to the frame of an automobile (Parks, CX 194 at 6).

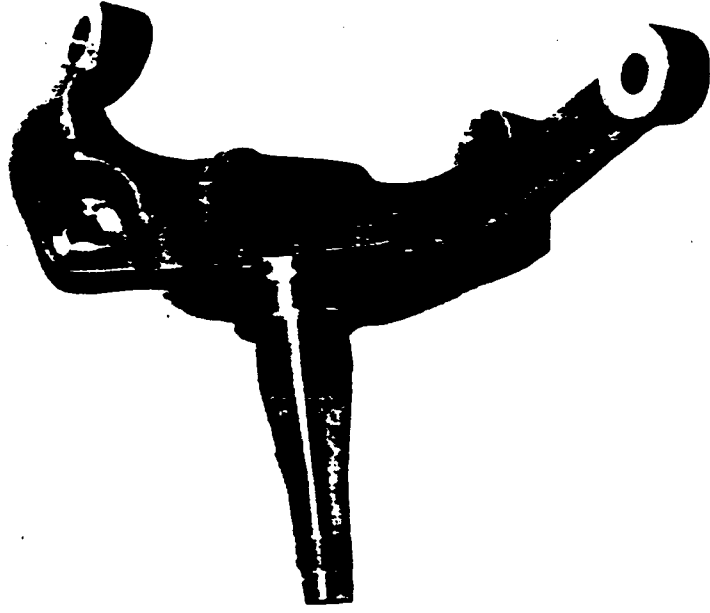


Exhibit 2



258. As to Exhibit 2 of CX 194, complainant's Willey testified:

Q You have used the term in your testimony on cross-examination of "spindle." Do you see a spindle depicted in Exhibit 2?

A Yes, sir, I see a portion of the picture that's directly over Exhibit 2.

Q What is the purpose of a spindle in an automobile?

A To hold the rotor and center it on the axle.

Q Is there any other purpose?

A For our use it's a very important part of the vehicle. It's the piece, and it says "spindle" in this case, but in a front wheel drive it's a bearing hub assembly, which is the same identical piece without the male end protruding.

We have to mount this. You have to relate to this. This is the -- this goes right to the heart of the machine to rotor properly. Without any relationship to this piece, it's almost impossible for a machine to rotor properly.

Q Does the brake yoke of the wheel assembly attach to this piece?

A Yes, it does.

Q How does it do that?

A It attaches -- it's hard to see the actual holes from that angle, but again, in that piece, just over Exhibit 2, right behind the male end of that, there's a -- you can see one hole directly in line with the spindle and there's another one down below it. It attaches through those holes.

Q Does the Pro-Cut device that you see in front of you attach at all to the spindle?

A Yes, sir, it's got to attach to it in order to make reference to it. Like I said, it's the most critical part of making the cut.

Q How does it attach to the spindle?

A Well, as you know, through the patent, it's a unitary design, one piece design, and it attaches through the

clutch assembly by the studs that either come from the bearing hub assembly or from the rotor that is attached directly to the spindle.

(Willey Tr. at 148, 149).

259. The term "attached" is something that is "secured, bolted" (Hooper Tr. at 227). The word "attaching" in the '146 patent means that one end of the attachment arm 7 is by means of bolts 8 "firmly immovably attached to the disc [sic] mounted brake yoke" (Kirk, Tr. at 348).

260. Respondents' lathe does not have any means for attaching the tool holder to the mounting point for a dismounted brake yoke (Kirk, RX 2, para. 9A).

261. Respondents' lathe does not attach in any way to the mounting points for a dismounted brake yoke as called for in claim 1 of the '146 patent. Respondents' lathe attaches only to the rotor, and through the mechanical U-shaped structure, allows a cutting tool to move radially (i.e. perpendicular to the rotor's axis of rotation) thereby cutting both sides of the rotor. Respondents' lathe is uniquely distinct from claim 1 of the '146 patent in that it attaches to the rotor of a disc brake and rotates the rotor while simultaneously holding two cutting tools in a fixed location relative to the axis of rotation of the rotor. By turning the crank on the respondents' lathe the cutting tool is advanced radially into the disc rotor. The respondents' lathe attaches only to the car rotor and this is distinctly different to what is taught in the '146 patent. Further, the respondents' lathe does not use any structure equivalent to a means for attaching said tool holder to the mounting points for a dismounted brake yoke. The respondents' lathe completely eliminates the need for any "attaching" said tool holder to the mounting points for a dismounted brake yoke..." (Kirk, RX 2, para. 5).

Exhibit 3 to Parks' witness statement (CX 194) shows how the clutch device is bolted to the rotor. See FF 249.

262. The portable lathe device claimed in the '146 patent comprises a portable driving mechanism, including a drive member with a clutch connected thereto which incorporates a centering feature to ensure that the driving mechanism and the brake disc shafts are properly aligned, the centering feature comprising a rotatable disc for mounting to the brake disc, a guiding means for aligning the rotatable disc with the brake disc and clamping means for locking the rotatable disc and the brake disc in aligned positions, a means for attaching the clutch to a brake disc enabling rotation of the disc when still mounted on a vehicle wheel shaft from which the wheel has been removed, a tool holder for two individually adjustable tools, adjacent the drive member, and providing a feed feature and a means for attaching the tool holder to the mounting points of a dismantled brake yoke (Kirk, RX 2, para. 7).

263. With respect to the accused CPX 5 (RPX 7), Kirk testified:

Q Dr. Kirk, referring to CPX 5, which is a Hunter Hunger machine right beside the Pro-Cut machine.

* * *

Q In your opinion, is there anything attached to the two [sic] holder that can be attached to the bores of a dismantled break yoke?

A Absolutely, positively, nothing, zero, nothing.

JUDGE LUCKERN: What is the basis for that? . . .

* * *

THE WITNESS: What I'm looking for, to answer your question, is something that has holes in it which will be able to go and attach to the disc [sic] mounted brake yoke holes by means of inserting bolts 8 into those holes.

I'm looking by the '146 teachings, to see something on the end of the Hunter/Hunger BL 300 which has holes in it. There is nothing at the end of the Hunter/Hunger BL 300 which has holes in it, so there is nothing that is attachment arm 7 that will let me go and make any physical connection, no physical connection that I can see to the dismantled brake yoke holes.

* * *

THE WITNESS: ...

The cylinder on the outside lateral surface of the tool slide is not adapted in any way, shape or form, to make connection to the disc mounted brake yoke holes.

JUDGE LUCKERN: Why do you say that? What's your basis for saying that?

THE WITNESS: Well, Your Honor, this is a cylinder. What I'm looking to pick up is two holes which are located on the spindle and do now [sic] move.

JUDGE LUCKERN: The spindle of the automobile?

THE WITNESS: Spindle of the automobile which is not part of the Hunter lathe. So somehow, I have to take a round surface with a hole in it and put two bolts into two holes, which are located on the spindle.

And there are no parts, nor is it the intent of this machine, the Hunter Machine, shown in CPX 5, there is no intent that this machine has any need whatsoever to pick up those mounting holes for its proper operation.

There is no need for that to occur. It does not occur.

(Kirk, Tr. at 348-50, 354).

[FF 144 of 8/12/94 ID]

264. With respect to the domestic device CPX 4, Kirk testified:

Q In your opinion, would you go through the same discussion with respect to the Pro-Cut machine?

JUDGE LUCKERN: Wait a minute. Is there a use of the dolly taught in the '146 patent, to your knowledge?

THE WITNESS: No, Your Honor, there is not

* * *

BY MR. COCKBURN:

Q Is there an attachment arm, or means for attaching said tool holder to the mounting points for a disc mounted brake yoke on Complainant's machine, CPX 4?

A No, there is not in CPX 4 any means for attaching the structure known as the brake lathe, to the disc [sic] mounted brake yoke holes at all -period.

(Kirk, Tr. at 360-61).

[FF 145 of 8/12/94 ID]

265. The trolley in respondents' lathe prevents rotation of the lathe during operation in addition to providing support from below (Kirk Tr. at 356-358).

266. Respondents' lathe employs a torque restraining rod to keep respondents' lathe from rotating during operation (Kirk Tr. at 356-358).

267. In the domestic device (CPX 4) there is no means for attaching the structure known as the brake lathe to the dismounted brake yoke holes at all (Kirk Tr. at 361).

268. Complainant's Hooper testified:

Q Is the tool holder attached when the strike that.

When CPX-4 [domestic device] is bolted to the hub of the car, the hub of the wheel, would you say that --

A Through the clutch adapter.

Q Through the clutch adapter. Would you say that the clutch adapter is attached to the disc [sic] mounted brake yoke?

A The clutch adapter never gets attached to a disc [sic] mounted brake yoke. A brake yoke only holds the brake pads. So when you're doing a brake job, that brake yoke can be on the bench. It can -- so, it's never attached to a brake yoke.

Q Is it attached to the holes of the disc [sic] mounted brake yoke?

A It is never attached to the holes. The clutch assembly is never attached to the holes of the dismantled brake yoke.

Q Is the tool holder attached to the holes of the dismantled brake yoke?

A The dismantled brake yoke, no.

Q Is the wheels of the, of the dolly attached to the holes of the dismantled brake yoke when it's in place?

A No.

(Hooper Tr. at 231-232).

269. With respect to the accused device (CPX 5, RPX 7) respondents' expert Kirk testified:

THE WITNESS: -- CPX 5, and this, the BL 300 Hunter brake lathe has a cutting tool slide located at one end of it. On the outside lateral surface of the cutting tool slide is presently located a cylinder with a hole in it, cylinder with a hole in it.

The cylinder with a hole in it is a protection tube for a drive shaft which is attached to the handle.

JUDGE LUCKERN: Where is the handle, so I can read it?

THE WITNESS: The handle is closest to the mounting stand.

JUDGE LUCKERN: Would you call that mounting stand a dolly?

THE WITNESS: Yes, that's a dolly. That was the words that were being used; closest to the dolly, and if you peer in the tube located on the outside lateral surface of the cutting tool, you will see a rod that is rotating when I rotate the handle which is closest to the dolly.

And that rod in there, Your Honor, has to be protected, because the entire cutting tool slide is capable of being adjusted in an axial direction further out from the dolly or closest to the dolly.

And when that happens, the rod length doesn't change, but it had the ability to allow the tool slide to move axially back and forth over it, and at some position, that rod that is turning with the handle closest to the dolly is going to be sitting out there

in space and could be hit, broken, tapped, or otherwise damaged.

So there is a cylindrical tube with a hole in it that protects it.

JUDGE LUCKERN: Now you said "tool slide." What's a "tool slide"?

THE WITNESS: The tool slide, Your Honor, would be the device that the cutting tools, the device that the cutting tools are moving in a radial direction inward and outward.

It would be the piece of metal that, when you rotate the handle closet to the dolly, the tools themselves are moving on top of. This is the tool slide and this is the tool holder.

JUDGE LUCKERN: And maybe you can physically describe it. It's a red something or other. Two things on top of it. Maybe you can physically describe it.

THE WITNESS: It is located underneath the tool holders and it has a dovetail type of a protrusion on top of it which is red in color, and the outside end of it, there is a cap screw located, and that device is the tool slide.

JUDGE LUCKERN: Is that two knobs on it?

THE WITNESS: These two knobs, Your Honor, provide the capabilities, if you turn them, causing the cutting tool holder to move inward and outward. It's a very fine graduation.

But you can see perhaps -- maybe you can't see. I'm turning this one and I'm getting it to move in.

JUDGE LUCKERN: Something is moving in?

THE WITNESS: Yes, this cutting tool holder, which is holding the physical cutting tool, is actually pivoting inward and outward, and since the brake rotor goes in between them, and I'll just put my finger here, and you can watch my finger as I turn this, getting closer and closer to it, and eventually, see how it's closing up that gap?

Okay, that's an adjustment that lets you determine how much metal you want to take off the rotor.

JUDGE LUCKERN: All right.

THE WITNESS: Now back to your question, which I may not have answered to its fullest. This cylinder over here --

JUDGE LUCKERN: This cylinder over here again?

THE WITNESS: I know. You're right to question me on that.

The cylinder on the outside lateral surface of the cutting tool slide is not in any way, shape or form, adapted to make connection to the disc mounted brake voke holes.

The cylinder on the outside lateral surface of the tool slide is not adapted in any way, shape or form, to make connection to the disc mounted brake voke holes.

JUDGE LUCKERN: Why do you say that? What's your basis for saying that?

THE WITNESS: Well, Your Honor, this is a cylinder. What I'm looking to pick up is two holes which are located on the spindle and do now [sic] move.

JUDGE LUCKERN: The spindle of the automobile?

THE WITNESS: Spindle of the automobile which is not part of the Hunter lathe. So somehow, I have to take a round surface with a hole in it and put two bolts into two holes, which are located on the spindle.

And there are no parts, nor is it the intent of this machine, the Hunter Machine, shown in CPX 5, there is no intent that this machine has any need whatsoever to pick up those mounting holes for its proper operation.

There is no need for that to occur. It does not occur.

JUDGE LUCKERN: And when you say "there is no need," why is there no need for it to occur?

* * *

THE WITNESS: You're not. These are all the questions that we asked ourselves when we began this case.

When you use this device, you make the attachment to the rotor of the automobile through the universal flange attaching to the mounting studs that your wheel goes on.

JUDGE LUCKERN: And the universal flange, describe that for the record. You know what that is anyway.

THE WITNESS: Yes, I do. That universal flange is located on CPX 5 and it's about in the middle of it, and it has cylindrical protrusions with fingers on it with holes in the fingers that are rotatingly adjustable that can pick up the

mounting studs of a disc brake rotor, and this entire device, that is the entire lathe, will attach to the disc brake rotor studs through means of the fingers that I described, and at that point, you can take stand off and get rid of it.

So the whole device is sitting there on the disc brake rotor at that point, and if you turn the rotor, what would happen is, the entire device would turn just like this, go round and round (indicating)

JUDGE LUCKERN: You just did something and why did you say what you did for the record? You removed something to get this to rotate. What did you remove?

THE WITNESS: I removed the device that is provided with the CPX 5, which is a torque restraining rod, and the torque restraining rod attaches to a shaft which is on the inside of the tool slide, which I previously described on CPX 5, and the cylindrical shaft on the tool slide is from the tool slide surface closest to the dolly, and points towards the dolly.

And as I demonstrated, that when you put the universal flange on the rotor, and you take off the dolly, the entire 50 or so pounds of this lathe is free to rotate if the wheel rotates, the brake drum rotates, and just go round and round and round.

And that wouldn't be very good when you start cutting because you would never be able to cut. The whole unit would start to spin. So you have to be able to resist the cutting forces, and in order to do that, you are provided with the BL 300 in CPX 5, a rod that has a hole in an attachment at the top of it, and that hole is sufficient in size to go over the black rod that is on the inside lateral surface of the tool slide.

You position it, you lock it in position, and then you raise the height up and down until it hits the ground, and at that point, you can't rotate this any more, doesn't rotate. All the weight is carried by the spindle.

You wouldn't even need the stand any more. You are ready to cut, and this CPX 5 is not described at all by the teachings of the '146, in my opinion.

(Kirk, Tr. at 351-358) (emphasis added).

270. As for the teaching of the '146 patent:

A Very clearly, the '146 patent, which I have read extensively, teaches me that I must mount my lathe to the disc mounted brake yoke holes. Disc mounted brake holes is where I must make my attachment to per the teachings of the '146.

* * *

THE WITNESS: Well, Your Honor, because what I'm taught in the '146 patent, and what I have seen in claim one, is that in order for my device to operate, I have to go in and mount to the disc [sic] mounted brake yoke holes. I must do that.

If I don't do that, I'm not taught that this device will work. And if I don't pick up the holes, I don't get a device which will conform to the '146 teachings.

(Kirk, Tr. at 330, 345, 346).

B. Analysis Of Ultimate Determination

The Doctrine of Equivalents was devised more than forty years ago to insure that a "patentee should not be deprived of the benefits of his patent by competitors who appropriate the essence of an invention while barely avoiding the literal language of the claims." London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538, 20 USPQ2d 1456-1458 (Fed. Cir. 1991) (London). The classical test for infringement under the Doctrine of Equivalents is that "infringement may be found if an accused device [or product] performs substantially the same function in substantially the same way to achieve substantially the same result" as the claimed device or product. London, 946 F.2d at 1538, 20 USPQ2d at 1458. See, also Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 608, 85 USPQ 328, 330 (1950) (Graver Tank); Genentech Inc. v. The Wellcome Foundation Ltd., 31 USPQ2d 1161, 1167 (Fed. Cir. 1994); Spectra Corp. v. Lutz, 839 F.2d 1579, 1582, 5 USPQ2d 1867 (Fed. Cir. 1988).

Recent decisions of the Federal Circuit have been quite restrictive in applying the Doctrine of Equivalents, treating it as the exception, not the rule:

... if the public come to believe (or fear) that the language of patent claims can never be relied on, and that the doctrine of equivalents is simply the second prong of every infringement charge, regularly available to extend protection beyond the scope of the claims, then claims will cease to serve their intended purpose. Competitors will never know whether their actions infringe a granted patent.

London, 946 F.2d at 1538, 20 USPQ at 1459.

Under the so-called "All Elements Rule," it must be shown that the alleged infringing product incorporates the substantial equivalent of every limitation of the patented claim. This requirement imposes the burden on the patentee of proffering evidence which

... is a sufficient explanation of both why the overall function, way, and result of the accused device are substantially the same as those of the claimed device and why the ... [accused element] is the equivalent of the claimed ... limitation.

Malta v. Schulmerich Carillons, Inc., 952 F.2d 1320, 1327, 21 USPQ2d 1161, 1166 (Fed. Cir. 1991), cert. denied, _____, U.S. _____, 112 S. Ct. 2942 (1992).

In issue is functional language in a combination claim which is "an attempt to define something by what it does rather than by what it is (as evidenced by specific structure or material, for example)". In re Swinehart, 439 F.2d 210, 212-213, 169 USPQ 226, 228 (CCPA 1971). Significantly a claim employing functional terminology covers any and all embodiments "which perform the recited function" In re Swinehart, 439 F.2d at 213, 169 USPQ at 229.

Referring to question 2a of the 9/29/94 order "the 'means for attaching' clause in claim 1 of the '146 patent" reads:

means for attaching said tool holder to the mounting points for a dismounted brake yoke (FP 224) (Emphasis added).³

³ The claims of a patent provide the concise formal definition of an invention. They are the numbered paragraphs "particularly pointing out and distinctly claiming the subject matter which the applicant regards as

In the 8/12/94 ID at 10, the administrative law judge construed said "means for attaching clause" of claim 1 as directed to the function for attaching the tool holder of the claimed lathe to the mounting points for a dismantled brake yoke. It appears that the Commission has adopted, inter alia, that claim construction.⁴

Claim 1 (FF 224) is directed by its terms to a one piece on-car brake lathe as shown in FIG. 2 of the '146 patent (FF 225 to 229). The claimed device comprises, inter alia, a means for attaching the tool holder to the mounting points of a dismantled brake yoke (FF 262). As complainant's Hooper (FF 243 to 247) testified, the term "attached" refers to something that is secured or bolted (FF 259). There is expert testimony from Dr. James Kirk (FF 234 to 237) that the word "attaching" on the '146 patent means that one end of the attachment arm is by means of bolts firmly immovably attached to the dismantled brake yoke (FF 259).

Since nothing on the accused lathe attaches the tool holder to the vehicle under repair at the holes for the dismantled brake yoke, the accused device does not contain any element having substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent, i.e. the function for attaching the tool holder to the mounting points for a dismantled brake yoke. (FF 260, 261, 263, 264, 269). In the accused device

his invention." 35 U.S.C. § 112. It is to the wording of the claims that one must look to determine whether there has been an infringement. See Autogiro Co. of America v. United States, 384 F.2d 391, 395-96, 155 USPQ 697, 701 (Ct. Cl. 1967), where the Court stated that courts can neither broaden nor narrow the claims to give the patentee something different than what he or she has set forth, and that "[n]o matter how great the temptations of fairness or policy making, courts do not rework claims. They only interpret them."

⁴ In item 4 of the Commission's 9/29/94 order, supra, the Commission stated that the subject ID "is adopted by the Commission in all other respects."

in issue, which corresponds closely to the domestic device in this respect (see "Analysis of Ultimate Determination" under question 2e, *infra*) there is no means for attaching the structure known as the brake lathe to the dismantled brake yoke holes because the device is bolted to the hub of a car through the clutch adapter (FF 267, 268). The clutch device in each of the accused and the domestic devices is never attached to the holes of a dismantled brake yoke which only holds the brake pad (FF 268).

Dr. David M. Parks, complainant's expert (FF 230 to 233), testified that in the accused device (FF 249) the "full attachment function" made between the tool holder and the spindle is "accomplished through the body of the lathe and the clutch adaptor, in conjunction with an anti-rotation element" (FF 248, 250) (emphasis added).⁵ Moreover, complainant's Willey (FF 238 to 242) testified that there is no means for attaching the tool holder to the mounting holes of a dismantled brake yoke (FF 256) and that the domestic device is a unitary one piece design which attaches to the brake yoke of the wheel assembly through the clutch assembly by the studs that either come from the bearing hub assembly or from the rotor that is attached to the spindle in an automobile (FF 258). The record shows that the tool holder of each of complainant's domestic lathe and the accused lathe is attached to the lathe body (FF 251), which lathe body is attached to the clutch adapter (FF 252), which clutch adapter is then attached to the spindle (FF 253, 254), and that the spindle holds the rotor and centers it on the axle of an automotive (FF 257, 258). However, the function of the "means for attaching" clause in claim 1 is to attach the tool holder to the mounting points of a dismantled brake

⁵ The anti-rotation element in the accused device is a trolley and torque restraining rod (FF 265, 266).

yoke, and the record clearly reflects that the clutch adapter is never attached to the holes of the dismantled brake yoke (FF 268). Thus any connection from the tool holder through the unitary body to the clutch adaptor is found not to be the substantial equivalent of the "means for attaching" called for in claim 1, since complainant has not shown that said connection performs the same function as the "means for attaching" clause, viz. attaching the tool holder to the mounting points of a dismantled brake yoke.

Complainant, in support of its position that the accused device does perform substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent, relies not on evidence that relates to the attaching function, but rather on evidence⁶ that relates to an anti-rotation function, which function is not provided for in the language of claim 1 in issue.

Question 2b

Addressing "question 2b," the accused device does not operate in substantially the same way as disclosed in the "Means For Attaching" clause in claims 1 of the '146 patent.

A. Specific Factual Findings In Support. See findings supra.

B. Analysis Of Ultimate Determination

In addition to performing substantially the same function, an accused device must perform that same function in substantially the same way to achieve substantially the same result in order to infringe a patent claim under the doctrine of equivalents. Graver Tank, 339 U.S. at 608, 85 USPQ at 330; Valmont Indust. v. Reinke Mfg., 983 F.2d 1039, 1043, 25 USPQ2d 1451,

⁶ See e.g., Hooper, CX 192, page 9 at question 32; Willey CX-196, page 27, at question 6; Parks, CX 194, pages 14-16 at question 20, 21, 22, 23, and 24, and Willey Tr. at 151 to 153.

1455, (Fed. Cir. 1993) (Valmont); Slimfold Mfg. Co. v. Kinkead Industries, Inc., 932 F.2d at 1453, 1457, 18 USPQ2d 1842, 1844 (Fed. Cir. 1991) (Slimfold Mfg.); Becton Dickinson and Company v. C.R. Bard, Inc., 922 F.2d 792, 797, 17 USPQ2d 1097 (Fed. Cir. 1990) (Becton Dickinson); Pennwalt, Corp. v. Durand-Wayland Inc., 833 F.2d 931, 934, 4 USPQ2d 1737, 1739 (Fed. Cir. 1987) (en banc), cert. denied, 485 US. 961 (1988) (Penwalt). Moreover, under the doctrine of equivalents, the accused device cannot work in "substantially the same way" if a limitation, or equivalent, is missing. Valmont, 983 F.2d at 1043 n. 2, 25 USPQ2d at 1455 n.2; Becton Dickinson, 922 F.2d at 798, 10 USPQ2d at 1100-01.

The '146 patent requires a means for attaching the tool holder to vehicle under repair at the mounting points for the dismantled brake yoke (FF 262). Respondents' lathe does not attach in any way to the mounting points for a dismantled brake yoke as called for in claims 1 of the '146 patent (FF 261, 263, 269). The accused device lacks this limitation, or its equivalent (FF 261). Nothing in the accused device is fixed to the tool holder, and nothing is attached to the mounting points for a dismantled brake yoke as specifically required by claim 1 of the '146 patent (FF 263). Rather, the only means employed by the accused device for attaching the tool holder to the vehicle under repair is by bolting the clutch device to the rotor (FF 261). Accordingly, the accused device does not perform the "attaching" function in substantially the same way as required by the '146 patent.

Question 2c

Addressing "question 2c," the accused device does not achieve substantially the same result as disclosed in the "Means For Attaching" clause in claim 1 of the '146 patent.

A. Specific Factual Findings In Support. See findings supra

B. Analysis of Ultimate Determination

To find infringement under the doctrine of equivalents, the accused product must obtain substantially the same result as specified under the patent in addition to performing substantially the same function in substantially the same way. Graver Tank, 339 U.S. at 608, 85 U.S.P.Q. at 330; Valmont, 983 F.2d at 1043, 25 USPQ2d at 1455; Slimfold Mfg., 932 F.2d at 1457, 18 USPQ2d at 1844; Becton Dickinson, 922 F.2d at 797, 10 USPQ2d at 1100-01; Pennwalt, 833 F.2d at 934, 4 USPQ2d at 1739.

Complainant's Hooper testified that "attached" indicates something that is "secured, bolted," (FF 259) and Kirk testified that as the term is used in the '146 patent it means that there is a firm immovable attachment of the tool holder to the dismounted brake yoke (FF 259). Thus the result of the "means for attachment" clause in claim 1 is the secured, bolted, firm and immovable connection of the tool holder to the mounting points of a dismounted brake yoke. On the accused lathe, nothing is bolted to, or attached to, or inserted into, the holes for a dismounted brake caliper and nothing is attached or fixed to the tool holder as required by claim 1 and by the '146 specification. (FF 261, 263, 269). Thus, because nothing on the accused lathe contains any structure or equivalent structure corresponding to the "attachment arm means" that attaches to the tool holder at one end and to the mounting points for a disc brake yoke at the other end, the accused devise does not achieve "substantially the same result" as disclosed in the "means for attaching" clause of the '146 patent.

Question 2d

Addressing "question 2d," the '146 patent is entitled to a narrow range of

equivalents.

A Specific Factual Findings In Support

271. In the first Office action of April 13, 1979 [in the prosecution of the '146 Patent] all of the original claims 1 to 5 were rejected. Original independent claim 1 and claims 2, 4 and 5, dependent on claim 1, were rejected over German patent 2,540,187 to Mossel. Original claim 3, dependent on claim 1, was rejected on insufficient structure recited to support claimed functions and as indefinite and incomplete (CX 191).

[FF 55 of 8/12/94 ID]

272. Original independent claim 1 [originally presented to the Patent Office in the prosecution of the '146 patent] read:

1. A portable lathe device, intended primarily for returning of brake discs and of the type incorporating a portable driving device, which is adapted to rotate the brake disc via a clutch device, when the brake disc is still mounted on the wheel shaft and from which brake disc the wheel has been dismantled, the lathe device furthermore incorporating a tool holder arranged adjacent the driving device and provided with feed means, wherein the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle, and with two individually adjustable lathe tools intended one for each side of the brake disc and is adapted to be moveable radially relative to the brake disc.
[Emphasis added]

As seen from the above the original claim 1 had the recitation "wherein the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle." (CX 191).

[FF 56 of 8/12/94 ID]

273. Original dependent claim 3 [originally presented to the Patent Office in the prosecution of the '146 patent] read:

3. A lathe device according to claim 1, wherein the clutch device incorporates a centering device adapted

to ascertain that the driving device and the brake disc shafts are aligned.

(CX 191).

[FF 57 of 8/12/94 ID]

274. In an amendment dated July 10, 1979 [in the prosecution of the '146 patent] original claims 4 and 5 were cancelled and claims 1, 2 and 3 were amended. The "Remarks" section of the amendment stated in part:

Claims 1, 2, 4 and 5 were rejected under U.S.C. 102 over the German Patent [2,540,187]. Claim 1 is hereby amended more clearly to define over the teachings of the German Patent, namely by recitation of a supporting arm rigidly connecting the tool holder of the device with the driving device to form an integral portable unit.

The German Patent has a portable driving device for rotating a disc brake and a tool holder having two individually adjustable tools. The driving unit and the tool holder are not however interconnected by a supporting arm as now defined in amended Claim 1. In the German arrangement the two units are connected by the rods of the wheel suspension but this means that it is necessary to make a very accurate and time wasting alignment of the two units before operation thereof. It is furthermore in practice almost impossible to obtain such a perfect mounting in all positions which is necessary for obtaining a satisfactory turning result. A possible bearing slackness in the wheel will furthermore result in an unsatisfactory machining of the disc since the risk for non-parallel mounting is high. By integrating the driving device and the tool holder, in accordance with revised Claim 1 of the instant application it is ensured that the turning of the disc will be made with the greatest possible precision as to parallelism. The drawbacks outlined in connection with the German device are therefore substantially eliminated. It is a further advantage of the device in accordance with the instant invention that the integral unit is more easily handled.

(CX 191) (emphasis added).

[FF 58 of 8/12/94 ID]

275. Amended claim 1 [in the prosecution of the '146 patent] read:

1. A portable lathe device, intended primarily for returning of brake discs and comprising a portable driving device including a drive member and a clutch device connected with said drive member, means for attaching said clutch device to a brake disc for rotation of the disc when still mounted on a wheel shaft and from which brake disc the vehicle wheel has been dismantled, a tool holder adjacent the driving device and provided with feed means, means for attaching said tool holder to the mounting points for a dismantled brake yoke, said tool holder including two individually adjustable lathe tools intended one for each side of the brake disc and said tool holder being moveable radially relative to the brake disc and a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit.

(CX 191).

[FF 59 of 8/12/94 ID]

276. Amended dependent claim 3 [in the prosecution of the '146 patent]

read:

3. A lathe device according to claim 1, wherein the clutch device incorporates a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned, said centering device comprising a rotatable disc for mounting to the brake disc, guiding means for aligning the rotatable disc with the brake disc and clamping means for locking the rotatable disc and the brake disc in aligned positions.

(CX 191).

[FF 60 of 8/12/94 ID]

277. In a second Office action dated September 28, 1979 [in the prosecution of the '146 patent it was stated]:

Claims 1 and 2 are rejected as being unpatentable over Mossel in view of Basseti [Italian patent 472,238 to Basseti] under 35 U.S.C. 103. It is considered to be an obvious expedient to mount a motor drive means at 5 and 6 and connect it to the tool slide both as taught by Basseti in Figs. 1 and 2.

Claim 3 is objected to as depending from a rejected

claim but is considered to be allowable if amended to include all the limitations of the parent claim.

(CX 191).

[FF 61 of 8/12/94 ID]

278. An amendment dated December 18, 1979 [in the prosecution of the '146 patent] cancelled amended claims 1 and 2 and in addition amended claim 3. Amended claim 3 corresponds to the claim in issue. It was represented that the Examiner had indicated that claim 3 is allowable as presently amended and that the present amendment includes all the limitations of the parent claim 1 and has been additionally amended to put claim 3 in independent form and to correct the syntax of the claim. (CX 191).

[FF 62 of 8/12/94 ID]

279. By action dated January 28, 1980 [in the prosecution of the '146 patent], the Examiner stated that amended claim 3 was allowable and a notice of allowance was mailed on March 13, 1980. (CX 191).

[FF 63 of 8/12/94 ID]

280. Disc brakes were around and were lathed before the device claimed in the '146 patent was in existence. (Hooper, Tr. at 205).

[FF 64 of 8/12/94 ID]

281. Hooper testified as to other devices for cutting front wheel drive disc brakes:

Q What did they use before your machine existed to cut front wheel drive disc brakes?

A There's been a two piece unit out at, that it's, Quickway has made one that is bolted directly to the caliper support bracket. There was a grisly grinder that came out of Canada, that Bear Corporation tried to -- two piece.

It was designed, I'm going to explain two piece. The quick way was a lathe that bolted to the caliper support bracket. But later they came up with an adapter, that would hook to a half inch drill

to turn the wheel instead of the motor.

Because it was more consistent when a car came in cold. And it was supposed to be run at a certain RPM's. The choke was cold, and the car would run faster, and you couldn't get a consistency of cuts.

So Quickway designed a unit to go to a half inch drill, so you could the half inch drill, that would turn the same RPM's all the time. It was not a very big success. But they did, it was available.

And then Honda had a trapped rotor. And Honda came up with one of their own that still in existence that you start the car up, and it's very similar to the Quickway. It's similar to the Acuturn.

There is numerous brake lathes. But before, there was only one, and that was the Quickway.

Q Now, even today, I think, would you agree that it's safe to assume that every mechanic in the country does not own either a Hunger or a Pro-Cut machine. Isn't that a safe assumption?

A That everyone does not, yes.

Q Okay, so, would it also be a safe assumption to say that some people today are still lathing disc brakes using a bench mounted lathe?

A Yes, they are.

[FF 65 of 8/12/94 ID]

282. Hooper testified as to prior art lathes (Tr. at 199 to 201):

Q I understand, so then with respect to rear wheel drive cars, the on car disc brake lathe and the conventional bench mounted lathe work, somewhat sim, work to a relatively similarity?

A Okay. When you have, when you dismount a rotor from a rear wheel drive car, you have bearing cups. In the rotor. Those bearing cups work as a centering device when you use a bench lathe and do a good job.

It won't make it as accurate as an on the car, because you can actually see and compensate with CPX 4 and CPX 5. But. As far as cutting it square, to the bench lathe, it will do it.

When you remove a rotor from a front wheel drive car, you have no studs, you have no lug nuts. And you have to rely on the college that you use, to try to hook, to mount this particular rotor, on a bench lathe, with no bearing cups.

I mean, you just, it's a very small surface that you touch. And numerous times I worked with engineers. And it's just, it's just not accurate.

I mean, I'm no engineer, but I sure work with them for eight, from Delco Marine down.

JUDGE LUCKERN: But would you say they were similar? I think the question was whether they're similar or not.

THE WITNESS: Well, similar. Do they perform the same function? Yeah, they both cut the rotor.

One will, like I say, one you can't compensate for the stock tolerances of the vehicle. Where you can compensate with CPX 4 [domestic device] and 5 [accused device] here. A bench brake lathe. Sometimes they say, that if you measure it on the car, and try to create that same run out situation on a bench lathe, that it works.

Well, we tried that. And it's been done. And it used to be said to do it. But if someone ever tried it, you can't do. I mean, you would see.

JUDGE LUCKERN: So your answer would be, no, they're not similar.

THE WITNESS: They're, well, I'll tell you. I mean it's like --

JUDGE LUCKERN: If you can answer it.

THE WITNESS: I don't, really the, you know, I mean. It's like saying is a Ford similar to a Cadillac?

Yeah, they got four wheels, and they do the same. But you know, the price tag is a little different, and the ride's a little better.

JUDGE LUCKERN: Fine.

THE WITNESS: So, my, when you say similar, that, those two machines cutting them on the car is much better than a bench lathe.

(Hooper, Tr. at 199-201).

[FF 66 of 8/12/94 ID]

283. Prior to complainant providing the patented lathe, there were bench lathes by companies like Ammco and two piece caliper lathes by companies

like Kwik-Way. (Hooper, CX 192 at 7).

[FF 67 of 8/12/94 ID]

284. There was basically no market acceptance for complainant's lathe when complainant started to sell the product in 1989 (Willey, CX 192 at 5).

[FF 68 of 8/12/94 ID]

285. The '146 patent issued on October 7, 1980 (CX 2).

B. Analysis of Ultimate Determination

The range of permissible equivalents depends upon the extent and nature of the invention, and may be more generously interpreted for a basic invention than for a less dramatic technological advance. Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n, 805 F.2d 1558, 1563, 231 USPQ 833, 835 (Fed. Cir. 1986). Assuming arguendo that the doctrine of equivalents is applicable, the administrative law judge finds that the '146 patent is entitled to a narrow range of equivalents. The concept of a portable lathe device of the type incorporating a portable driving device, adapted to rotate the brake disc via a clutch device when the brake disc is still mounted on the wheel shaft and from which brake disc the wheel has been dismantled, with the lathe device also incorporating a tool holder arranged adjacent the driving device and provided with feed means, with the tool holder equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle, and with two individually adjustable lathe tools intended one for each side of the brake disc and adapted to be moveable radially relative to the brake disc, is not novel with complainant as shown by the rejection of original claim 1 of the '146 patent application as filed over a German patent. The German patent showed a portable driving device for rotating a disc brake and a tool holder. (See FF 272-79). Moreover, disc brakes were known and

were being lathed before the device claimed in the '146 patent was in existence (FF 280-84). In addition, while the '146 patent issued on October 7, 1980 (FF 285), the record shows that there was basically no market acceptance for the patented lathe when complainant started to sell the product in 1989 (FF 284). Accordingly, the administrative law judge finds that the '146 patent is entitled to a narrow range of equivalents, assuming arguendo the doctrine of equivalents is applicable.

Question 2e

Addressing "question 2e" the domestic industry is not practicing the '146 patent under the doctrine of equivalents.

A. Specific Factual Findings In Support. See findings under "Question 2a," SUPRA.

B. Analysis of Ultimate Determination


For the same reasons that the accused device does not infringe the '146 patent, as set forth under "B. Analysis Of Ultimate Determination" for question 2a, supra, the evidence also shows that the alleged domestic industry is not practicing the '146 patent because the analysis of the coverage of the Pro-Cut lathe (the domestic industry) by the '146 patent is substantially identical to the analysis with respect to infringement by the accused device. As complainant admitted:

Because of the close correspondence between the accused device and the Pro-Cut [complainant's domestic] lathe, the analysis of the coverage of the Pro-Cut lathe by the '146 patent is substantially identical to that set forth above with respect to infringement by the accused device. To avoid repetition, that analysis is incorporated herein by reference as it directed to the Pro-Cut lathe. The conclusion is the same...

Complainant's Prehearing Statement at 37.

Counsel for the parties shall have in the hands of the administrative

law judge a copy of this initial determination with those portions containing confidential business information designated in brackets, no later than Friday, December 9, 1994. No such bracketed version shall be served by telecopy on the administrative law judge. If no such version is received from a party, it will mean that the party has no objection to removing the confidential status, in its entirety, from this initial determination.


Paul J. Luckern
Administrative Law Judge

Issued: November 28, 1994

Huby

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of _____
CERTAIN PORTABLE ON-CAR DISC BRAKE LATHES
AND COMPONENTS THEREOF _____

Investigation No. 337-TA-361

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SEP 29 P 1

NOTICE OF COMMISSION DETERMINATIONS TO REVIEW AND REMAND
TO THE PRESIDING ADMINISTRATIVE LAW JUDGE CERTAIN PORTIONS
OF AN INITIAL DETERMINATION TERMINATING THE INVESTIGATION
ON THE BASIS OF A FINDING OF NO VIOLATION OF SECTION 337,
AND TO DESIGNATE THE INVESTIGATION MORE COMPLICATED

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review certain portions of the initial determination (ID) issued on August 12, 1994, in the above-captioned investigation, and to remand the investigation to the presiding administrative law judge (ALJ) for further proceedings. The Commission has further determined to designate this investigation "more complicated" and to direct that the ALJ's ID on remand be issued by November 28, 1994.

FOR FURTHER INFORMATION CONTACT: Shara L. Aranoff, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3090.

SUPPLEMENTARY INFORMATION: On November 24, 1993, the Commission instituted an investigation of a complaint filed by Pro-Cut International, Inc. ("Pro-Cut") under section 337 of the Tariff Act of 1930. The complaint alleged that two respondents imported, sold for importation, or sold in the United States after importation certain portable on-car disc brake lathes and components thereof that infringed the sole claim of U.S. Letters Patent 4,226,146 ("the '146 patent"). The Commission's notice of investigation named as respondents Hunter Engineering Company ("Hunter") and Ludwig Hunger Maschinenfabrik GmbH ("Hunger"), each of which was alleged to have committed one or more unfair acts in the importation or sale of portable on-car disc brake lathes that infringe the asserted patent claim.

The ALJ conducted an evidentiary hearing on May 2-4, 1994, and issued his final ID on August 12, 1994. He found that: (1) respondents' imported product does not infringe the asserted patent claim; (2) complainant satisfied the economic requirements for existence of a domestic industry; but that (3) there is no domestic industry because complainant is not practicing the '146 patent. Based upon his findings no infringement and no domestic industry, the ALJ

concluded that there was no violation of section 337. Respondents have not challenged the validity of the '146 patent in this investigation.

Complainant Pro-Cut filed a petition for review of the ALJ's findings on both infringement and the domestic industry's failure to practice the patent. Respondents filed a petition for review of the ALJ's findings on the economic requirements for a domestic industry. Complainant, respondents, and the Commission investigative attorneys filed responses to the petitions for review. No agency comments were received.

On September 28, 1994, the Commission determined, by a vote of four to two, to review the subject ID and to remand it to the ALJ for further explanation on two narrow issues. Specifically, the Commission was unable to discern from the ID the ALJ's reasoning underlying his findings of no infringement and no domestic industry under the doctrine of equivalents. Accordingly, the ALJ was instructed to address the following questions on remand:

1. Whether the accused device performs substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
2. Whether the accused device operates in substantially the same way as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
3. Whether the accused device achieves substantially the same result as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
4. To what scope of equivalents is the '146 patent entitled?
5. Whether, in light of questions 1-4 raised above, the domestic industry is practicing the '146 patent under the doctrine of equivalents?

The ALJ was further instructed to make specific factual findings with respect to each remanded question, to indicate what record evidence supports those findings, and to provide an analysis of his ultimate determination on each issue. The Commission determined to adopt the ID in all other respects.

On September 28, 1994, the Commission also determined to declare this investigation "more complicated" in order to provide the parties, the presiding ALJ, and the Commission with adequate time to address the remanded issues and complete the investigation. The 18-month statutory deadline for completion of this investigation was therefore extended to June 1, 1995. However, the Commission expects to complete the investigation prior to the statutory deadline.

This action is taken under the authority of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337), and sections 210.53, 210.56, and 210.59 of the Commission's Interim Rules of Practice and Procedure (19 C.F.R. §§ 210.53,

210.56, and 210.59).

Copies of the Commission's order, the non-confidential version of the ID, and all other non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone 202-205-3000. Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

By order of the Commission.



Donna R. Koehnke
Secretary

Issued: September 29, 1994

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of)

CERTAIN PORTABLE ON-CAR DISC BRAKE LATHES)
AND COMPONENTS THEREOF)
_____)

Investigation No. 337-TA-361

ORDER

On November 24, 1993, the Commission instituted an investigation of a complaint filed by Pro-Cut International, Inc. ("Pro-Cut") under section 337 of the Tariff Act of 1930. 58 Fed. Reg. 63393 (Dec. 1, 1993). The complaint alleged that respondents Hunter Engineering Company ("Hunter") and Ludwig Hunger Maschinenfabrik GmbH ("Hunger") imported, sold for importation, or sold in the United States after importation certain portable on-car disc brake lathes and components thereof that infringed the sole claim of U.S. Letters Patent 4,226,146 ("the '146 patent").

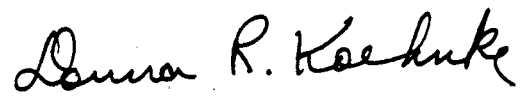
On August 12, 1994, the ALJ issued his final ID finding no violation of section 337 in the investigation. Specifically, he found that: (1) respondents' imported product does not infringe the asserted patent claim; (2) complainant satisfied the economic requirements for existence of a domestic industry; but that (3) there is no domestic industry because complainant is not practicing the '146 patent. Complainant and respondents filed petitions for review of the ID on August 25, 1994. All parties filed responses on September 1, 1994.

Having considered the subject ID, the petitions for review, the replies

thereto, and the record in this investigation, the Commission determines to review and remand the subject ID for further explanation on two narrow issues. Specifically, the Commission is unable to discern from the ID the ALJ's reasoning underlying his findings of no infringement and no domestic industry under the doctrine of equivalents. Accordingly, it is hereby ORDERED THAT -

1. The presiding administrative law judge's ID of August 12, 1994, is reviewed and remanded to the ALJ in part for further proceedings consistent with this order.
2. On or before November 28, 1994, the ALJ shall issue an ID addressing the following remanded questions:
 - a. Whether the accused device performs substantially the same function as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - b. Whether the accused device operates in substantially the same way as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - c. Whether the accused device achieves substantially the same result as disclosed in the "means for attaching" clause in claim 1 of the '146 patent?
 - d. To what scope of equivalents is the '146 patent entitled?
 - e. Whether, in light of questions a-d raised above, the domestic industry is practicing the '146 patent under the doctrine of equivalents?
3. The ALJ shall make specific factual findings with respect to each remanded question, indicate what record evidence supports those findings, and provide an analysis of his ultimate determination on each issue.
4. The subject ID is adopted by the Commission in all other respects.
5. This investigation is designated "more complicated" and the statutory deadline for completion of the investigation extended to June 1, 1995.
6. The Secretary shall serve copies of this order upon each party of record in this investigation and on the Department of Health and Human Services, the Department of Justice, and the Federal Trade Commission, and shall publish notice thereof in the Federal Register.

By order of the Commission.

A handwritten signature in cursive script that reads "Donna R. Koehnke".

Donna R. Koehnke
Secretary

Issued: **September 29, 1994**

Ruby

PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter Of)
)
Certain Portable On-Car)
Disc Brake Lathes And)
Components Thereof)

Investigation No. 337-TA-361

Initial Determination

Paul J. Luckern, Administrative Law Judge

Pursuant to the Notice of Investigation (58 Fed. Reg. 63393 (December 1, 1993)), this is the administrative law judge's final initial determination, under Commission interim rule 210.53 (19 C.F.R. § 210.53). The administrative law judge hereby determines, after a review of the record developed, that there is no violation of subsection (a) (1) (B) (i) of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), in the importation into the United States, the sale for importation, or the sale within the United States after importation, of certain portable on-car disc brake lathes and components thereof.

ID rec'd	8-12-94
Conf.	8-12-94
Public	9-2-94
ID	(8-15-94) (9-2-94 P)
Petition due	8-29-94
Resp to pet. due	
Gov't comments due	
Public comments due	
Comm. decision due	9-29-94

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ABBREVIATIONS

CB Complainant's Initial Post Hearing Brief
CRB Complainant's Reply Brief
CPX Complainant's Physical Exhibit
CX Complainant's Exhibit
FF Finding of Fact
RPX Respondents' Physical Exhibit
RX Respondents' Exhibit
SB Staff's Post Hearing Initial Brief
SRF Staff's Objections and Rebuttal Findings
of Fact to Complainant's and Respondents'
Proposed Findings

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PROCEDURAL HISTORY

By notice dated November 24, 1993, the Commission instituted an investigation, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, to determine whether there is a violation of subsection (a) (1) (B) (i) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain portable on-car disc brake lathes and components thereof, by reason of alleged infringement of the single claim of U. S. Letters Patent 4,226,146 (the '146 patent), and whether there exists an industry in the United States as required by subsection (a) (2) of section 337. The Commission's Notice was published in the Federal Register on December 1, 1993. 58 Fed. Reg. 63393 (Dec. 1, 1993).

On May 3, 1994, pursuant to Commission interim rule 210.36(b), Order No. 42 found certain evidentiary inferences. A hearing was held on May 2, 3 and 4 at which all parties set forth in the notice of investigation appeared. Post hearing submissions have been filed, followed by closing argument on May 26.¹

The matter is now ready for this final initial determination which is based on the entire record compiled at the hearing and the exhibits admitted into evidence. The administrative law judge has also taken into account his observation of the witnesses who appeared before him during the hearing.

¹ There is a gap, at page 16, in the text of complainant's initial post hearing brief, which was filed on May 18, 1994. On August 1, the attorney advisor contacted complainant's counsel by telephone to determine whether the gap was merely a printing or photocopying error in the copy received by the administrative law judge. On August 2, complainant's counsel confirmed that the gap was not a photocopying error, but rather was created during editing of the brief under the pressure of the deadline for filing on May 18, and with a view toward meeting the page limitation set at the close of the hearing. Complainant's counsel stated that said gap also appears in the copies of the briefs filed with the Commission and those distributed to the parties. It was further stated that although complainant's counsel were aware of the gap, counsel did not know exactly what language was omitted on said page 16.

Proposed findings submitted by the parties participating in the hearing not herein adopted, in the form submitted or in substance, are rejected either as not supported by the evidence or as involving immaterial matters. The findings of fact of this determination include references to supporting evidentiary items in the record. Such references are intended to serve as guides to the testimony and exhibits supporting the findings of fact of the administrative law judge. They do not necessarily represent complete summaries of the evidence supporting said findings.

JURISDICTION

The Commission has in rem, and subject matter jurisdiction. It also has in personam jurisdiction based on the appearance of counsel for complainant and the respondents.

PARTIES

Complainant is Pro-Cut International, Inc. (Pro-Cut). The respondents are Ludwig Hunger Maschinenfabrik GmbH (Hunger) and Hunter Engineering Company (Hunter) (respondents) (FF 1 to 6).

OPINION ON VIOLATION

The products in issue are certain portable on-car disc brake lathes and components thereof. Neither the respondents nor the staff has asserted in their post hearing submissions that the '146 patent is invalid or unenforceable. Based on the those submissions, the issues have been limited to the following:

1. Whether respondents' accused device infringes the only claim of the '146 patent; and
2. Whether certain of complainant's activities constitute a domestic

industry.²

I. INFRINGEMENT ANALYSIS

Complainant has the burden of proving infringement of the claims in issue by a preponderance of the evidence. See Under Sea Industries, Inc. v. Dacor Corp., 833 F.2d 1551, 1557, 4 USPQ2d 1772, 1776 (Fed. Cir. 1987); Hughes Aircraft v. United States, 717 F.2d 1351, 1361, 219 USPQ 473, 480 (Fed. Cir. 1983); Environtech Corp. v. Al George, Inc., 730 F.2d 753, 758, 221 USPQ 473, 477, (Fed. Cir. 1984) (Environtech).³

Infringement is considered in a two step analysis. First, the scope of the claim is determined, together with the range of permissible equivalents by reference to the claim language, specification and prosecution history according to technical rules of interpretation. Palumbo v. Don-Joy Co., 762 F.2d 969, 974, 226 USPQ 4, 7-8 (Fed. Cir. 1985). Second, the claim is applied to the accused device to determine whether literal infringement exists or whether the claim is infringed under the doctrine of equivalents. SRI Int'l. v. Matsushita Electric Corp. of America, 775 F.2d 1107, 1118-21, 227 USPQ2d 577, 583-86 (Fed. Cir. 1985) (en banc) (SRI); Specialty Composites v. Cabot Corp., 845 F.2d 981, 986, 6 USPQ2d 1601, 1603-04 (Fed. Cir. 1988); Howes v. Medical Components, Inc., 814 F.2d 638, 643, 2 USPQ2d 1271, 1273-74 (Fed. Cir. 1987).

A. Claim Construction

In determining the scope of the claim of the '146 patent, the claim is

² Each of the respondents has admitted that the accused products have been imported into the United States and sold to third parties in the United States. (CX 37 at 2, 3, 4, 7 and 9).

³ Complainant argued in its prehearing statement at 37 that its analysis relating to the accused device is also applicable to its domestic product.

construed in light of claim language, the prior art, any prosecution history and the specification, and not in light of the accused device. SRI, 775 F.2d at 1118, 227 USPQ at 583. Moreover the claim is "not construed 'to cover' the accused device," because that procedure would make infringement a matter of judicial whim, but rather said claim must be construed without reference to the accused device. Id. The words of the asserted claim are given their ordinary and accustomed meaning unless it appears from the specification and prosecution history that the inventor intended differently. Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 882, 8 USPQ2d 1468, 1471 (Fed. Cir. 1988); Environtech, 730 F.2d at 759, 221 USPQ at 477. The meaning that an inventor gives to words in the application as filed cannot be changed to conform to subsequent events. Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992) (Intellicall); Lear Siecler, Inc. v. Aerogup, Corp., 733 F.2d 881, 889, 221 USPQ 1025, 1031 (Fed. Cir. 1984). See also 4 Chisum, Patents § 18.03[3].

If parties dispute the meaning of critical claim language, a court may rely also on testimony of witnesses. Tandon Corp. v. United States Int'l Trade Comm'n, 831 F.2d 1017, 1021, 4 USPQ2d 1283, 1286 (Fed. Cir. 1987) (Tandon). The specification may be used to interpret what the patentee meant by words or phrases in a claim, but the claim, not the specification, determines the scope of the invention. E.I. duPont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433, 7 USPQ2d 1129, 1131 (Fed. Cir. 1988) (duPont).

A claim may be written in a means plus function form. 35 U.S.C. §112

¶6.⁴ In construing a "means plus function" claim, a number of factors,

⁴ Pursuant to the sixth paragraph of 35 U.S.C. § 112:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material or acts described in the specification and equivalents thereof. [Emphasis added]

The emphasized language places a limiting condition on the use of means-plus-function language. As the Federal Circuit stated in Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 25 USPQ2d 1451, (Fed. Cir. 1993) (Valmont):

... A claim limitation described as a means for performing a function, if read literally, could encompass any conceivable means for performing the function. Johnston v. IVAC Corp., 885 F.2d 1574, 1580, 12 USPQ2d 1382, 1386 (Fed. Cir. 1989). [Johnston] This second clause confines the breadth of protection otherwise permitted by the first clause. Id. The applicant must describe in the patent specification some structure which performs the specified function. Moreover, a court must construe the functional claim language "to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112. Section 112 thus permits means-plus-function language in a combination claim, but with a "string attached." The "attached string" limits the applicant to the structure, material, or acts in the specification and their equivalents. Indeed the section operates more like the reverse doctrine of equivalents than the doctrine of equivalents because it restricts the coverage of literal claim language. Johnston, 855 F.2d at 1580.

Valmont, 983 F.2d at 1043, 25 USPQ2d at 1454. Johnston, referred to by the Court in Valmont, has the following language:

...But section 112 ¶6 operates to cut back on the types of means which could literally satisfy the claim language. Id.; Data Line Corp. v. Micro Technologies, Inc., 813 F.2d 1196, 1201, 1 USPQ2d 2052, 2055 (Fed. Cir. 1987). On the other hand, the section has no effect on the function specified -- it does not extend

(continued...)

including the language of the claim, the patent specification, the prosecution history of the patent, and expert testimony may be considered. Durango Associates, Inc. v. Reflange, Inc. 843 F.2d 1349, 1356, 6 USPQ2d 1290, 1294 (Fed. Cir. 1988).

The single claim of the '146 patent reads:

Claim 1:

A portable lathe device intended primarily for returning of brake discs and comprising

- (a) a portable driving device including a drive member and
- (b) a clutch device connected with said drive member,
- (c) said clutch device incorporating a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned, said centering device comprising
- (d) a rotatable disc for mounting to the brake disc,
- (e) guiding means for aligning the rotatable disc with the brake disc and
- (f) clamping means for locking the rotatable disc and the brake disc in aligned position,
- (g) means for attaching said clutch device to a brake disc for rotation of the disc when still mounted on a wheel shaft and from which brake disc the vehicle wheel has been dismantled,
- (h) a tool holder adjacent the driving device and provided with feed means,
- (i) means for attaching said tool holder to the mounting points for a dismantled brake yoke,
- (j) said tool holder including two individually adjustable lathe tools intended one for each side of the brake disc and
- (k) said tool holder being moveable radially relative to the brake disc and

⁴(...continued)

the element to equivalent functions.

Johnston, 855 F.2d at 1580, 12 USPQ2d at 1386.

(1) a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit⁵. [FF 29] [Emphasis added]

1. Meaning of "clutch device"

In clauses (b), (c), and (g), supra, of claim 1, the term "clutch device" is used. Complainant argued that although respondents have argued that the clutch recited in the asserted claim means something analogous to an automotive transmission device, the '146 patent defines the clutch recited in the claim as a centering adaptor having means to be mounted to the "fitting bores or guide spindles of a brake disc."

Respondents' position is that a clutch is "the apparatus by means of which a motor is temporarily connected or disengaged from a rotor" (RX 2, para. 12).

The staff argued that since the '146 patent specification contains a statement of how the inventor intended to define the term "clutch," this definition should be applied.

Based on the description of the clutch device set forth by the invention in the specification of the '146 patent (FF 34, 35), the administrative law judge finds that the term "clutch device" refers to gripping or holding something as, for example, a centering adaptor.

2. Meaning of the claimed phrase "means for attaching said tool holder to the mounting points for a dismantled brake yoke"

Complainant argued that the "means for attaching" clause (clause (i), supra) should be construed as "a matter of law" to require an attachment arm as disclosed in the specification of the '146 patent or any equivalent

⁵ The claim in issue is in a single paragraph format with no parenthetical lettering. For ease of reference the elements of the claim have been set out with each element given a letter designation.

structure which serves an anti-rotation function for the one piece, on-car, portable brake lathe (CRB at 11).

The staff argued that the stated function specifically set forth in means clause (i) is for "attaching the tool holder to the mounting bores for a dismantled brake yoke" (SB at 12) (Emphasis by the staff).

Functional language in a claim describes an element of an invention in terms of what it accomplishes rather than in terms of what it is. 2 Chisum, Patents §8.04. As the legislative history indicates, the initial portion of 35 U.S.C. § 112, sixth paragraph, provides that an element of a claim for a combination may be expressed as a means or step for performing the function specified in the claim, without the recital in the claim of structure, material or acts in support thereof. 2 Chisum, Patents §8.04[2][a]. The function specified in the claimed means clause(i), supra, is for "attaching"⁶ a tool holder to the mounting points for a dismantled brake yoke, not for preventing any rotation. Said attachment function is repeatedly referred to in the specification and the prosecution history of the '146 patent. Thus, in the first paragraph under the heading SUMMARY OF THE INVENTION, and before any reference to any specific embodiment, the inventor discloses that his portable lathe device is characterized such "that the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke" (FF 31).

The inventor, in the disclosure following SUMMARY OF THE INVENTION, in describing each of the non-integral FIG. 1 embodiment (FF 37, 141) and integral FIG. 2 embodiment (FF 52, 146), refers to the attachment function.

⁶ Webster's Third New International Dictionary (1976) defines "attach" as "make fast or join (as by string or glue)".

Thus, under the heading DESCRIPTION OF SOME PREFERRED EMBODIMENTS, and with reference to the FIG. 1 embodiment, it is disclosed that "an attachment arm 7 has thereupon by means of bolts 8 been fixed in the bores intended for fitting of the brake yoke" (FF 33). Thereafter in describing the FIG. 2 embodiment the inventor discloses that "[o]ne end of an attachment arm 7^[7] is by means of bolts 8 attached to the bores for the brake yoke" (FF 34). Moreover, the only independent claim in the application, as filed, had the recitation "wherein the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle" (FF 56). While the original claim 1 was initially amended and later cancelled during the prosecution of the '146 patent, the means for attaching the tool holder to the mounting points for a dismantled brake yoke was carried through to the claim

⁷ Complainant, in its proposed findings 41 and 42, asserted that attachment arm 7 in FIG. 2 of the '146 patent refers to CPX4A, and that in FIG. 2 and in complainant's on-car brake lathe, attachment arm 7 "marked as CPX4A" is nothing more than an element which stops the machine from rotating. The staff objected to said findings on the ground that they are contrary to statements made by complainant at the hearing expressly disavowing reliance upon component CPX4A (SRF at 3). The complainant did represent on May 3, 1994 that at no time did it assert that CPX4A was part of the domestic product (Tr. at 77). The complainant later represented, with respect to inference G which reads:

- G. In an earlier design, respondents used an attachment arm as called for by the claim of the patent. In a later design, respondents removed the attachment arm and replaced it with its current floor stand. Certain of the functions performed by the original attachment arm are now performed by the current floor stand. Respondents believed that the floor stand is a substitute for the attachment arm. [FF 75]

that because complainant has already stipulated, and in fact there is no evidence in the record, that the accused lathe has ever been sold in the United States with an attachment arm of any sort, inference G does not apply to anything that has happened in the United States and "in fact it's irrelevant. Just as we previously decided with regard to . . . [CPX4A]" (Tr. at 532).

in issue (FF 55 to 63). Accordingly, the administrative law judge construes means clause (i), supra, as directed to the function for attaching the tool holder of the claimed lathe to the mounting points for a dismantled brake yoke.

B. Infringement Analysis

Literal infringement of a patent requires that each element recited in a claim at issue be found in the accused product. If literal infringement is found, the analysis ends and liability attaches. Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 607, 85 USPQ 328, 330 (1950) (Graver Tank).

Under the doctrine of equivalents, infringement may be found when the accused device performs substantially the same function, in substantially the same way, to yield substantially the same result as the claimed invention. Graver Tank, 339 U.S. at 608, 85 USPQ at 330. In Dolly, Inc. v. Spalding & Evenflo Companies, Inc., 16 F.3d 394, 29 USPQ2d 1767 (Fed. Cir. 1994) (Evenflo), it was stated: "'Under the doctrine of equivalents, the accused device and the claimed invention cannot work in 'substantially the same way' if a limitation (including its equivalent) is missing." Evenflo, 16 F.3d at 397-98, 29 USPQ2d at 1769, citing Valmont, 983 F.2d at 1043, n.2. Moreover, application of the doctrine of equivalents is the exception, and not the rule. Charles Greiner & Co., Inc. v. Mari-Med. Mfg., Inc., 962 F.2d 1031, 1036, 22 USPQ2d 1526, 1530 (Fed. Cir. 1992); London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538, 20 USPQ2d 1456, 1458-59 (Fed. Cir. 1991).

Complainant argued that the accused device falls within the claim in issue either under the literal language of the claim under the "equivalents thereof" language of 35 U.S.C. § 112, sixth paragraph, or under the doctrine

of equivalents.^{8 9}

⁸ Complainant included with its post-hearing submissions a copy of the concurring opinion of Judge Rich in Baltimore Therapeutic Equipment Co. v. Loredan Biomedical, Inc., No. 93-1301, 1331, slip op. (Fed. Cir. April 12, 1994) (Baltimore). The first page of said opinion has the legend:

NOTE: Pursuant to Fed. Cir. R. 47.6, this disposition is not citable as precedent. It is a public record. The disposition will appear in tables published periodically.

At closing argument the staff argued that any unreported, unpublished Federal Circuit opinion is not citable as precedent. (Tr. at 419). Complainant responded:

MR. KILE: No. I don't wish to challenge the rule [Fed. Cir. R. 47.6] It is the rule. You can't cite an unprecedented [sic] opinion as precedent. That doesn't mean that anyone in presenting an oral argument and trying to rely on logic is estopped from using or referring to the logic that anyone else has expressed on what he believes to be a similar subject.

* * *

MR. KILE: I agree with the Court. Do not give it [slip concurring opinion in Baltimore] any weight as a decision of the Court of Appeals for the Federal Circuit.

(Tr. at 420, 421, 422). Baltimore is reported at 30 USPQ2d 1672 with the word "(Unpublished)" in its caption. Baltimore was before circuit judges Rich, Mayer and Schall and Judge Schall delivered the Court's "DECISION." The concurring opinion of Judge Rich, under the heading "Rich, J., concurring" is reported at 30 USPQ2d at 1677.

This administrative law judge knows of no authority for the proposition that an unpublished decision, including any concurring opinion, of the Federal Circuit should affect in any way a published decision of the Federal Circuit.

⁹ Complainant, in support of its position on infringement, argued that the '146 patent is a pioneer patent (Tr. at 432, 437, 438, 441, 548). In In re Certain Stabilized Hull Units and Components, Inv. No. 337-TA-103, 218 USPQ 752, 765 (1982) (Hull Units), the Commission observed that the Supreme Court in Westinghouse v. Boyden Power Brake Co., 170 U.S. 537, 561-62 (1892) defined "pioneer" as used to describe certain patents as follows:

This word [pioneer], although used somewhat loosely, is commonly understood to denote a patent covering a function never before performed, a wholly novel device, or one of such novelty and importance as to mark a distinct step in the progress of the art, as

(continued...)

The respondents and the staff argued that there is no infringement because the language of the claim in issue does not encompass respondents' device and because respondents' device does not infringe under the doctrine of equivalents on the ground that the accused device does not have clause (i), supra, of the asserted claim. Respondents further asserted that there is no infringement because the accused device does not include a "clutch" called for by the asserted claim.

In applying the "means plus function" paragraph of 35 U.S.C. § 112, sixth paragraph, with respect to means clause (i), supra, it is first necessary to determine whether the accused device performs the function stated in said means clause (i). If it does perform the function, only then must the question be answered as to whether the means "in the accused device which

⁹(...continued)

distinguished from a mere improvement or perfection of what had gone before. Most conspicuous examples of such patents are: The one to Howe of the sewing machine; to Morse of the electrical telegraph; and to Bell of the telephone.

The Commission in Hull Units concluded that when the prior art was examined the patented device in issue was not a pioneer invention.

The concept of a portable lathe device of the type incorporating a portable driving device, adapted to rotate the brake disc via a clutch device, when the brake disc is still mounted on the wheel shaft and from which brake disc the wheel has been dismantled, the lathe device also incorporating a tool holder arranged adjacent the driving device and provided with feed means with the tool holder equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle, and with two individually adjustable lathe tools intended one for each side of the brake disc and adapted to be moveable radially relative to the brake disc is not novel with complainant as shown by the rejection of original claim 1 of the '146 patent application as filed. (See FF 55 to 63). Moreover, disc brakes were known and were being lathed before the device claimed in the '146 patent was in existence (FF 64 to 68). In addition, while the '146 patent issued on October 7, 1980 (FF 28), the record shows that there was basically no market acceptance for the patented lathe when complainant started to sell the product in 1989 (FF 68). Accordingly, the administrative law judge finds that the '146 patent is not a pioneer patent.

performs the function stated in the claim is the same as or an equivalent of the corresponding structure described in the patentee's specification as performing that function." D.M.I., Inc. v. Deere & Co., 755 F.2d 1570, 1575, 225 USPQ 236, 239 (Fed. Cir. 1985) (Emphasis added). The administrative law judge finds that the record supports the conclusion that the accused device lacks the means and function of means clause (i), supra, viz. means for attaching the tool holder to the mounting points for a dismantled brake yoke (FF 142, 143, 144).

Complainant, in order to find the claimed means clause (i), supra, in the accused device, refers to the unitary connecting arm (3) and the mounting of the device to the brake assembly through brake disc (50) (FF 148). The accused device does have a supporting connecting arm (3) rigidly connecting the tool holder assembly to the motor unit to form an integral portable unit (FF 149). However, that structure corresponds to the structure of clause (1) of the asserted claim, supra, which is distinct from the means of means clause (i), supra, of the asserted claim (FF 148). Complainant's position ignores the means of clause (i) for performing the claimed function of attaching the tool holder to the mounting points for dismantled brake yoke, viz. an attachment arm. All words in a claim must be considered in claim interpretation. See In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Moreover, a court may not ignore meaningful structural limitations of a claim on which the public is entitled to rely to avoid infringement. See Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1528, 3 USPQ2d, 1321, 1324-25 (Fed. Cir. 1987).

Complainant has "maintained throughout the course of this investigation that this element [claimed means clause (i), supra,] is present in the accused

devices... in the form of an anti-rotation post or mounting trolley either of which are used interchangeably to prevent the lathe from rotating. In the accused device the anti-rotation post or mounting trolley does prevent rotation, in combination with the unitary structure of the lathe" (FF 147, CB at 3) (Emphasis added). This additional function of preventing rotation is not specified in claim 1 but is specified in the '146 patent specification for the FIG. 2 embodiment means for attaching the tool holder to the mounting points for a dismounted brake yoke (FF 35). Neither the anti-rotation post nor mounting trolley, however, is found to provide the attaching function specified in claimed means clause (i).¹⁰

Assuming arguendo, that the accused device has the claimed means (i), the administrative law judge finds that the means in the accused device for performing the function of rotation prevention, viz. the anti-rotation post or mounting trolley, is neither the same as, nor equivalent to, the structure described in FIG. 2, viz. attachment arm 7, under either 35 U.S.C. § 112, sixth paragraph, or under the doctrine of equivalents. Thus in the FIG. 2 embodiment of the '146 patent, the anti-rotation means is attached to the mounting points of a disc brake yoke. In contrast, as the accused device CPX-5 shows, neither its anti-rotation post nor mounting trolley is attached to the disc brake yoke.

The administrative law judge does find that the accused lathe includes a "clutch" as defined in the '146 patent, consistent with his finding, supra, as

¹⁰ In the accused device either the anti-rotation post or mounting trolley prevents rotation. Thus inference H reads:

Respondents believe that the floor stand or support rod of the accused products operate to prevent rotation of the on-car portable brake lathe [FF 76].

to the meaning of "clutch service" in the asserted claim. (FF 121).

Based on the foregoing, as it relates to the claimed means (i), supra, the administrative law judge finds that complainant has not established, by a preponderance of evidence, that the accused device infringes claim 1 of the '146 patent.

II. DOMESTIC INDUSTRY

Complainant has the burden of proving the existence of a domestic industry. Certain Methods of Making Carbonated Candy Products, Inv. No. 337-TA-292, Commission Opinion at 34-35 (March 8, 1990); Certain Concealed Cabinet Hinges and Mounting Plates, Inv. No. 337-TA-289, Commission Opinion at 22 (Dec. 28, 1989) (Hinges). Pursuant to section 337(a)(3), a complainant may prove the existence of a domestic industry by showing that

. . . there is in the United States, with respect to the articles protected by the patent . . . concerned --

- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

A. The "Economic Aspects" of the Domestic Industry

Complainant argued that it is the owner by assignment, dated December 22, 1992, of the '146 patent in issue, and that its lathe in issue is currently being manufactured in New Hampshire; that development of the market for its product required "extensive and continuous effort" by complainant in terms of educating and training potential customers about the capabilities and use of the product, and complainant has engaged in substantial research and development to improve its product; that complainant and its "principal

supplier," Micro-Precision, Inc. (MP), which produces complainant's product pursuant to an oral agreement, have made significant investment in equipment and facilities for the production, testing, assembly, warehousing and shipment of the product, as well as in office space;

Respondents argued that complainant has contrived to create the appearance of significant irrevocable and binding investment through a course of self-dealing among companies with common ownership, including the leasing and loaning of employees and assets from one to the other, and planned production of its subject disc brake lathe through contractors who have no contracts and have yet to produce anything, in order to fabricate a basis for jurisdiction at the Commission; that such investment must be "irrevocable and binding" in order to contribute to the existence of a domestic industry, citing Hinges, Commission Opinion at 21; that complainant is nothing more than a shell corporation which borrows or leases its minimal assets and handful of workers from other corporations with common owners and itself produces nothing; and that complainant has "yet to cause its first domestically manufactured brake lathe to be produced," and at the time of filing its complaint to the present, complainant has been selling-off its existing inventory of imported Swedish manufactured VBG lathes.

The staff argued that, assuming that complainant is found to practice the claim of the '146 patent, the activities of complainant and MP are sufficient to meet the domestic industry standard in Section 337.

The record demonstrates that until December 1992, complainant imported fully assembled lathes, but since that time complainant has only imported certain components of the lathes (FF 152);

In addition, the record shows that the value of the parts of complainant's lathe that are not imported into the United States while the value of the imported components

Thus it is clear that complainant and its subcontractor MP make complainant's lathe in the United States, and that said production is sufficient to meet the domestic industry requirement of section 337. See Certain Static Random Access Memories and Integrated Circuit Devices Containing Same, Processes for Making Same, Components Thereof, and Products Containing Same, Inv. No. 337-TA-325, Unreviewed Initial Determination, Order No. 9 at 5-6 (May 14, 1991).

Moreover, the administrative law judge finds that MP's activities should be considered in determining whether there is a domestic industry with respect to

complainant's lathes since the Commission has considered the activities of subcontractors as part of the domestic industry. See e.g., Certain Methods of Making Carbonated Candy Products, Inv. No. 337-TA-292, Unreviewed Portion of Initial Determination at 142 (Dec. 8, 1989); Certain Feathered Fur Coats and Pelts, and Process for the Manufacture Thereof, Inv. 337-TA-260, Unreviewed Initial Determination at 16-17 (Sept. 24, 1987); Certain Bag Closure Clips, Inv. No. 337-TA-170, Unreviewed Initial Determination at 39 (1984).

With regard to investment in plant and equipment, the record reveals that

to assembly and testing equipment, warehousing and general space related to its lathes (FF 183); that the value of complainant's assembly equipment (FF 178) and the value of complainant's office and administrative equipment

that complainant has purchased the molds used by MP to produce the lathe bodies, and molds for the casting of smaller lathe parts required for its lathes,

and that complainant also owns several instruments known as profilometers used to evaluate the quality of the surface finish on a brake disk

According to MP's President and General Manager, John W. Wiggins (FF 25, 192),

Moreover,
according to Wiggins,

¹¹ Although complainant's Willey testified that at least some of the tools used by MP in the manufacture of complainant's are "useable" for other purposes, he also testified that he had not seen them used for purposes other than complainant's lathe (FF 214). In addition, there is no requirement that equipment must be dedicated solely to production of a complainant's product, and domestic industries have been found to exist where different products were produced with the same equipment and labor. See e.g., Certain Integrated Circuit Telecommunication Chips and Products Containing Same, Including Dialing Apparatus, Inv. No. 337-TA-337, Unreviewed Portion of Initial Determination at 97 (March 9, 1993) (Telecommunication Chips).¹²

Regarding employment of labor with respect to complainant's lathe, the record demonstrates that complainant

¹¹ For a "partial list" of MP machinery used "exclusively or principally" in the production of complainant's lathes, see FF 213.

¹² See also Telecommunication Chips, Inv. No. 337-TA-337, Notice of Commission Decision to Review Certain Limited Portions of an Initial Determination, and Schedule for the Filing of Written Submissions on the Issues Under Review, and on Remedy, the Public Interest, and Bonding (April 27, 1993).

at its Lebanon, New Hampshire facility (FF 167), resulting
in approximately

that as of the end of April 1994,

and MP spent

and that, according to complainant's witness regarding
the domestic industry, Brian Kelly,¹³

The administrative law judge finds that the labor
expended by complainant and MP is significant under section 337(a)(3)(B).
Hinges, Commission Opinion at 22; Certain Strip Lights, Inv. No. 337-TA-287,
Unreviewed Portion of Initial Determination at 31 (June 27, 1989) (Strip
Lights).

With respect to investment in the exploitation of the patent through
research and development, the record demonstrates that complainant purchased

that complainant conducted research and
development to improve the microfinish produced by its lathe when the product
was first received from Europe (FF 186), and made changes to the design of the

¹³ Kelly, who holds a Bachelor's Degree with Honors from Stanford
University, a Master's in Public Affairs Degree from the Woodrow Wilson School
of Princeton University and, as of the hearing, had largely completed the
requirements for the Ph.D. Degree in Economics at Harvard University, analyzed
the various documents produced by complainant and Micro-Precision in this
investigation, inspected the physical facilities of complainant and Micro-
Precision, reviewed original accounting records, and interviewed complainant
and Micro-Precision personnel. (See FF 261-218).

lathe (FF 186); that complainant has spent

including the outside consultants from Dartmouth College and Archie Frangoulis, the consulting engineer, as well as the time and salaries of its own employees (FF 187-188); and that

Such investment in research and development is found to be substantial within the meaning of section 337(a)(3)(C). Strip Lights, Unreviewed Portion of Initial Determination at 30.

Respondents' argument that complainant is a shell corporation which shares employees with commonly owned companies and which constitutes a fabricated domestic industry for the Swedish company VBG is rejected. Although there is evidence that complainant shares certain employees and facilities with other commonly owned companies (FF 169-172), the record also establishes that complainant is the owner of the '146 patent (FF 175-176) and, together with MP, produces a substantial number of lathes in the United States for sale in the United States and abroad (FF 163-166, 197-203, 206, 209-210).¹⁴ Moreover, respondents' argument that the lack of a written production agreement between complainant and MP also indicates that there is no domestic industry is also rejected. Although the record indicates that there is in fact no written agreement between complainant and MP (FF 203), the record demonstrates that the relationship between complainant and MP is well defined and well understood by complainant and MP (FF 203). The absence of a written

¹⁴ Although complainant's lathe carries the VBG trademark (FF 160), the record establishes that complainant has acquired the right to use said mark under license from VBG (FF 161). The administrative law judge finds that use of said mark by complainant in no way establishes that complainant is a "shell corporation" designed to confer a domestic industry on VBG.

agreement with MP is not inconsistent with the manner in which complainant does business (FF 204). Moreover, it is clear from the record that despite the absence of a writing evidencing the relationship between complainant and MP, those companies have been doing business together on a substantial basis (FF 197-210), and expect to continue to do so (FF 203). The instant facts are distinguishable from Hinges, on which respondents rely. In Hinges the Commission held that "investments" in equipment to be delivered in the future under a contract that the complainant could have rescinded upon payment of cancellation, should not be considered as part of the domestic industry because such investments were not "irrevocable and binding." Hinges Commission Opinion at 21. Here, the record is clear that complainant and MP have already produced many of the subject lathes and have already invested in machinery and labor in order to produce the subject lathes. Thus, such investments have already been made, resulting in past and current production of the subject lathes, and are not subject to rescission or cancellation as in Hinges.

Based on the foregoing, the administrative law judge finds that complainant has established the economic aspects of the domestic industry requirement under each of 35 U.S.C. § 1337(a)(3)(A), (B) and (C).

B. Practice of the Only Claim of the '146 Patent

Complainant in its prehearing statement, at 37, represented:

Because of the close correspondence between the accused device and the Pro-Cut [complainant] lathe, the analysis of the coverage of the Pro-Cut lathe by the '146 patent claim is substantially identical to that set forth above with respect to infringement by the accused device. To avoid repetition, that analysis is incorporated herein by reference as if directed to the Pro-Cut lathe. The conclusion is the same, the '146 patent claim covers both the accused device and the Pro-Cut lathe.

Accordingly, in view of the findings and conclusion of the administrative law

judge with respect to complainant's infringement allegation, the administrative law judge concludes that complainant has not established that the only claim of the '146 patent covers complainant's lathe (CPX-4).

III. FINDINGS OF FACT

A. The Parties

1. Pro-Cut International, Inc. (Pro-Cut) is a New Hampshire corporation with its principal place of business at HC63 Box 22H, Lebanon, New Hampshire. Pro-Cut, the owner of the '146 patent by assignment, manufactures portable on-car disc brake lathes, primarily through sub-contractors located in New Hampshire. (J. Dore, CX 192, Ans. 8; Kelly, CX 195, Ans. 5; Willey, CX 196, Ans. 4; CX 2; CX 72).

2. At the inception of Pro-Cut, its lathe was manufactured by VBG Produktor, AB, a Swedish company. The lathe was imported into the United States as a semi-finished product and Pro-Cut then performed final assembly, testing, and quality control before shipping the lathes to customers. (Willey, CX 199 at 2).

3. Pro-Cut originally sold its lathe under the trademark "VBG" and continues to use that mark to avoid the loss of goodwill in the name, notwithstanding the fact that the lathe is now made by Pro-Cut and its contractors in the United States. (Willey, CX 199 at 2).

4. Pro-Cut holds a license to use the VBG trademark on its portable on-car brake lathe. (Hooper, Tr. at 258).

5. Ludwig Hunger Maschinenfabrik GmbH (Hunger) is a German corporation with a principal place of business at Ludwig-Hunger-Strasse 1, 86916 Kaufhermy, Federal Republic of Germany. Hunger manufactures the accused portable on-car disc brake lathes and associated components in Germany, which are then shipped to the United States for distribution by respondent Hunter. (CX 36 at 1; CX 37 at 2, 3, 4, 7).

6. Hunter Engineering Company (Hunter) is a Missouri corporation with a

place of business at 11250 Hunger Drive, Bridgeton, Missouri 63044. Hunter is engaged in the importation into the United States and sale after importation of the accused portable on-car disc brake lathes that are manufactured in Germany by Hunger. (CX 37 at 2-3, 4-5, 7, 9).

B. Expert Witnesses

7. Complainant's expert, Dr. David M. Parks, is a professor of mechanical engineering at the Massachusetts Institute of Technology. (Parks, CX 194, Ans. 3). Parks works in the area of fracture mechanics, plasticity and finite element analysis. (Parks, CX 194, Exh. 1).

8. Prior to joining MIT, Parks was an Assistant Professor of Engineering at Yale University. (Parks, CX 201 at 1).

9. Parks was graduated from the University of Illinois in 1971 with a Bachelor of Science degree in Engineering Mechanics. He received a Master of Science degree in Engineering from Brown University in 1973 and a Ph.D. degree in Engineering from Brown University in 1975. (Parks, CX 194 at 1).

10. Parks was qualified as an expert in engineering mechanics and mechanical engineering. (Tr. at 262).

11. Respondents' expert, Dr. James Kirk, is a professor of mechanical engineering at the University of Maryland and has taught at said university since 1972. (RX 2A). Kirk worked as a development engineer for the Ford Motor Company in 1966 and 1967 and has been a member of the Society of Automotive Engineers since 1980. (RX 2A).

12. Kirk was graduated from Ohio University in 1967 with a Bachelor of Science degree in Electrical Engineering. He received, from M.I.T., a Master of Science degree in mechanical engineering in 1969 and a Doctor of Science degree in mechanical engineering in 1972.

13. Kirk considers himself to have greater knowledge than one of ordinary skill in the art. (Kirk, Tr. at 322, 323).

14. Kirk was qualified as an expert in mechanical engineering, manufacturing and general automotive engineering. (Tr. at 301, 305, 310).

C. Messrs. Willey, Hooper and Wiggins

15. Joseph Willey is the President of Complainant Pro-Cut. (Willey, Tr. at 92, 93, 2; Willey, CX 196 at 1).

16. Willey is also one of the owners of Pro-Cut along with Paul Hooper and Lorin Dore. (Willey, CX 196 at 1).

17. Willey, manages the day-to-day operations of Pro-Cut International, makes sales calls on large customers, handles customer relations, and manages production to insure that the operation runs smoothly. (Willey, CX 196 at 1).

18. Willey has had extensive education in the use of portable brake lathe equipment. (Willey, Tr. at 88).

19. Willey is intimately familiar with the structure and operation of the Pro-Cut on-car brake lathe. (Willey, CX 196, at 6).

20. Paul Hooper, who is an officer of complainant worked as an automobile mechanic for 25 years. (Willey, Tr. at 193).

21. Hooper trained Hunter's engineers with respect to the operation of the Pro-Cut on-car brake lathe. (Hooper, Tr. at 194, 195).

22. Hooper is familiar with the accused brake device marked as CPX 5. (Hooper, Tr. at 216).

23. Hooper has been actively working with the Pro-Cut on-car brake lathe for about five to six years. (Hooper, Tr. at 249; Hooper, CX 192, at 1).

24. In addition to being an owner of Pro-Cut, Mr. Hooper is a Vice

President and travels around the country making sales calls on large national accounts like Sears, Wards, and General Motors. (Hooper, CX 192, at 1).

25. John W. Wiggins is the President and General Manager of Micro-Precision Inc. (Wiggins, CX 198 at 1).

26. Micro-Precision is a machine shop, manufacturing company with all around capabilities of manufacturing mills, lathes, grinders, drills, CNC turning and milling and deburring. (Wiggins, CX 198 at 1).

D. A Person Having Ordinary Skill In The Art

27. A person of ordinary skill in the art in issue is a person who is knowledgeable about the general area and subject matter, and can understand the words, of the '146 patent and has some understanding of what lathes do and what cutting is as well as a general understanding of how one might resurface the rotor of a disc brake rotor. For such a person there is the requirement either of a considerable amount of experience, on the order of two, three or four years in the machine tool area or a bachelor of science degree in an engineering field (Kirk Tr. at 322, 323).

E. The '146 Patent and Claim in Issue

28. The '146 patent, entitled "Portable Lathe Device" issued on October 7, 1980, to the inventor Uno Ekman, based on Application Serial No. 933,588 (the '588 application), filed August 14, 1978. On February 4, 1992, the inventor Ekman assigned all of his right, title and interest in the '146 patent to Ekmans Konstruktions AB. Thereafter, on May 5, 1993, Ekmans Konstruktions AB assigned all of its rights in the '146 patent to complainant Pro-Cut. (CX 2; CX 72).

29. Claim 1 (the only claim) of the '146 patent reads as follows:

A portable lathe device, intended primarily for returning of brake discs and comprising a portable

driving device including a drive member and a clutch device connected with said drive member, said clutch device incorporating a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned, said centering device comprising a rotatable disc for mounting to the brake disc, guiding means for aligning the rotatable disc with brake disc and clamping means for locking the rotatable disc and the brake disc in aligned position, means for attaching said clutch device to a brake disc for rotation of the disc when still mounted on a wheel shaft and from which brake disc the wheel has been dismantled, a tool holder adjacent the driving device and provided with feed means, means for attaching said tool holder to the mounting points for a dismantled brake yoke, said tool holder including two individually adjustable lathe tools intended one for each side of the brake disc and said tool holder being moveable radially relative to the brake disc and a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit.

(CX 2, Col. 4:9-31). (Emphasis added).

30. The '146 patent under the heading BACKGROUND OF THE INVENTION recites:

The present invention refers to a portable latch device intended primarily for re-turning worn out brake discs for braked wheel shafts. When reconditioning brakes it has hitherto usually been necessary besides exchanging the brake blocks, to dismount the brake disc when the wear thereon has called therefore, and to send it to a work shop having the facilities necessary for effecting a re-turning thereof. This has meant that the vehicle has been subjected to stillstand during some time, as there has not for certain been any machine time available at the work shop in question when the brake disc has been delivered for re-turning.

For similar purposes small portable lathe devices have earlier been developed, which devices have been adapted particularly for turning of brake discs, but those older constructions has been designed in such a way that it has been necessary to dismount the brake disc although it has not been necessary to send it to a work shop for the machining.

The portable lathes device according to the invention

eliminates this problem as the lathe device makes it possible to effect the re-turning of the brake discs, while these are still mounted on the vehicle and thus they need not be dismantled from the shaft, which means an apparent simplification of the work operation. The lathe device is at the same time of such an uncomplicated type and of so cheap construction that it can be used and owned by small car workshops, filling stations and the like.

(CX 2, col. 1, lines 5 to 34).

31. The '146 patent, following the heading SUMMARY OF THE INVENTION, states:

These features [disclosed in the BACKGROUND OF THE INVENTION, supra] have been achieved with a portable lathe device which incorporates a portable driving device, which is adapted to rotate the brake disc via a clutch device when the brake disc is still mounted on the wheel shaft and from which brake disc the wheel has been dismantled, the lathe device furthermore incorporating a tool holder arranged adjacent the driving device and provided with feed means and the lathe device is characterized thereby that the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle and with two individually adjustable lathe tools intended one for each side of the brake disc and adapted to be moveable radially relative to the brake disc.

The invention will hereinafter be further described with reference to two embodiments of the lathe device according to the invention shown in the accompanying drawings.

(CX 2, col. 1, lines 35 to 53) (Emphasis added).

32. The '146 patent (CX 2), refers to two embodiments, viz. FIG. 1 and FIG. 2, as shown below:

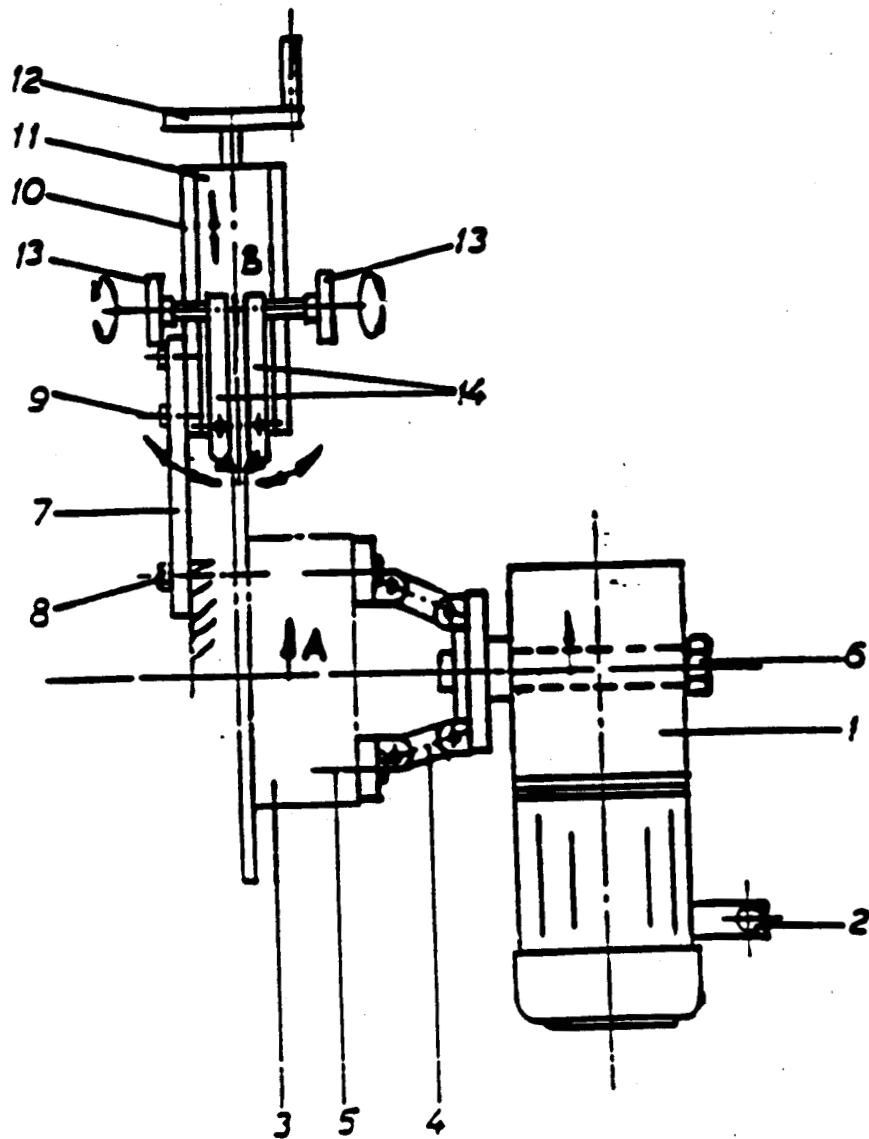


FIG. 1

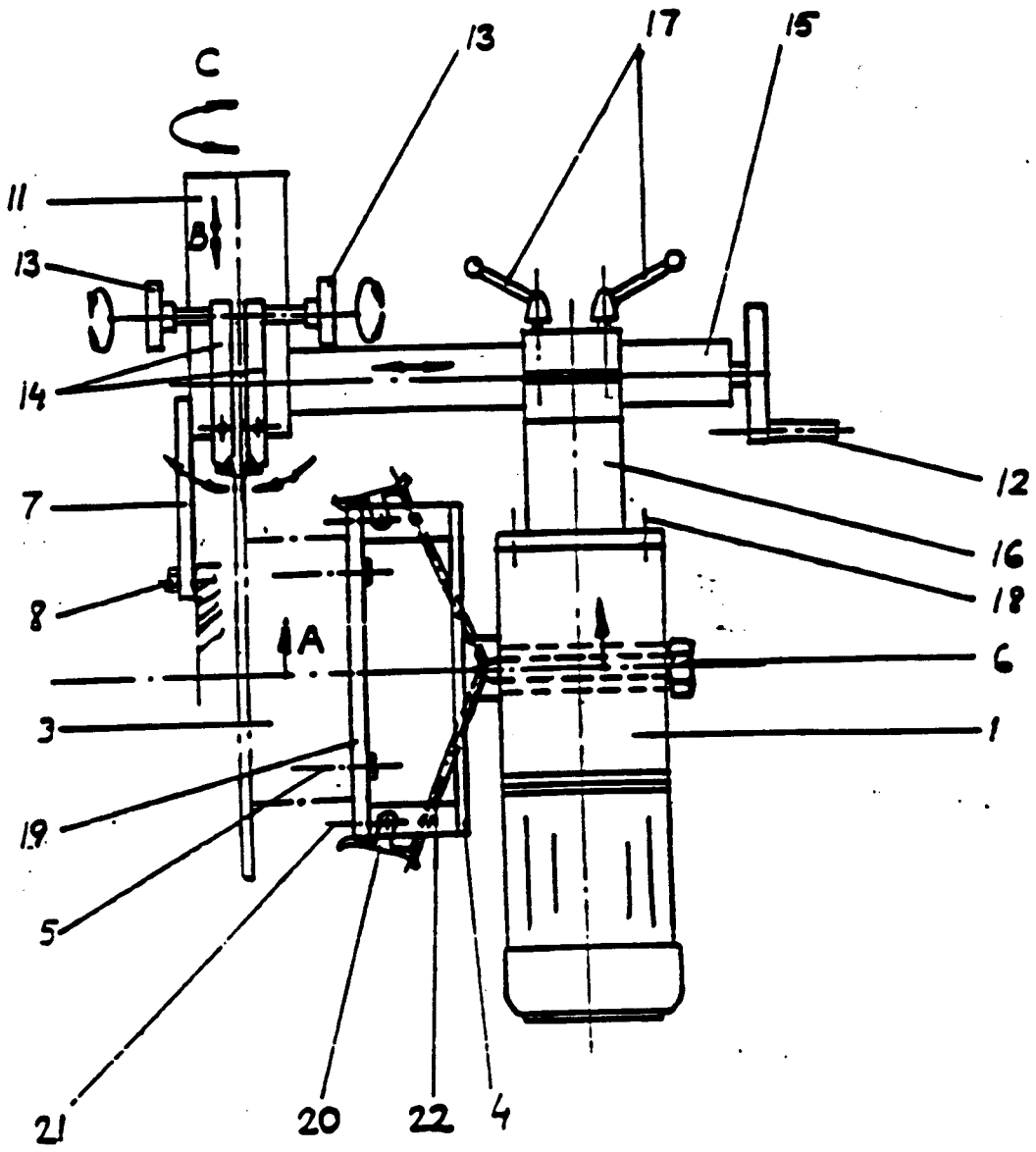


FIG 2

In the above embodiments the '146 patent identifies item 7 as the "attachment arm"; item 8 as "bolts" which attaches one end of the attachment arm 7 to the bores for the brake yoke; item 4 as the "clutch device"; item 15 as a "supporting arm" which is connected to item 1, i.e. a "driving motor," via item 16 which is a "bracket" (CX 2).

33. The '146 patent, under the heading DESCRIPTION OF SOME PREFERRED EMBODIMENTS, and referring to the FIG. 1 embodiment states:

The lathe device according to the invention shown in FIG. 1 incorporates a driving device 1, which for instance can be an electric motor provided with a worm transmission. The motor is prevented from rotating by means of a supporting post 2 and it is adapted via a clutch to drive the brake disc 3, which is still mounted on the wheel shaft, in the direction shown by arrow A. The clutch device 4 is connected to the brake disc by means of a screw joint 5 fitted in the brake disc bores or guide spindles intended for attachment of the wheel hub with its tire to the brake disc.

The brake yoke with the brake shoes and the brake pistons have been dismantled from the wheel and an attachment arm 7 has thereupon by means of bolts 8 been fixed in the bores intended for fitting of the brake yoke. The attachment arm 7 is via bolts 9 attached to a tool holder incorporating a bottom plate 10 provided with guides along which a carrying plate 11, which carries lathe tools 14 is displaceable in the direction of arrow B. The carrying plate motion is effected manually via a hand wheel 12 and a transmission. The lathe tools 14, one for each side of the brake disc, are both individually laterally adjustable by means of one adjustment screw 13 each. The bottom plate 10 can be mounted in right hand or left hand positions relative to the attachment arm 7 to be able to be used for reconditioning of brake discs situated at any side of the vehicle.

(CX 2, col. 1, lines 64-68, col. 2, lines 1-23). (Emphasis added)

34. Referring to the FIG. 2 embodiment, the '146 patent states in part:

In FIG. 2 is thus shown a driving device 1, which is prevented from rotating. The brake disc 3 is driven in the direction A by the driving device 1, which e.g.

can be a worm transmission motor or the like through the intermediary of a clutch device 4 designed as a mounting plate fixed to the fitting bores or the guide spindles of the brake disc intended in normal operation to receive a wheel hub with tire by means of a screw joint 5. One end of an attachment arm 7 is by means of bolts 8 attached to the bores for the brake yoke, whereas the opposite end of the attachment arm is fixed so one end of a supporting arm 15, which at its end situated nearest to the attachment arm 7 supports the carrying plate 11. . . . The clutch device 4 in this embodiment incorporates a mounting plate 19, which is fitted to the brake disc by means of screws or nuts 5 in the holes for the rim bolts. The clutch device furthermore incorporates a number of guiding pins and clamping shoulders 20, which are fitted to the mounting plate 19 by means of suitable members at 21 and these clamping shoulders 30 are adapted to lock the mounting plate when locking bars 22 are acted upon when the center screw 6 is tightened.

(CX 2, col. 2, lines 28 to 42, 61 to 68, col. 3, lines 1-2). (Emphasis added).

35. Referring to both embodiments FIG. 1 and FIG. 2, the '146 patent discloses:

Both embodiments of the portable lathe device shown in FIGS. 1 and 2 work mainly in the same manner and give the same advantages. After the vehicle, on which the brake discs shall be re-turned, has been blocked up and wheel and brake yoke with brake shoes and brake pistons have been dismantled the attachment arm 7 is fitted to the bores for the brake yoke. The clutch device 4 is centered and fixed to the brake disc by means of the fitting member 5 and the carrying plate 11 of the tool holder is adjusted to its correct position in relation to the brake disc, whereupon the lathe tools 14 are individually adjusted by means of the hand wheels 13 to accurate turning positions. The driving motor 1 is thereupon started and it rotates the brake disc via the built in gear. The lathe tools 14 are immobile except for their adjustment possibilities, sideways and in the feed direction shown by arrows B. The feed of the lathe tools in the radial direction of the brake disc is effected by means of manual maneuvering on the hand wheel 12, but it is also possible to connect this hand wheel to an air driven, slowly rotating drilling machine or the like for obtaining a more even lathe tools feed. In the embodiment according to FIG. 2 the attachment arm

7 is furthermore intended to ascertain that the driving motor does not start to rotate and it thereby takes over the function of the supporting post 2 at embodiment according to FIG. 1. [Emphasis added]

(CX 2, col. 3, lines 9 to 32, col. 4, lines 1 to 3).

36. The '146 patent specification states:

The invention is not limited to the embodiments shown in the accompanying drawings but variations and modifications are possible within the scope of the appended claims.

(CX 2, col. 4, lines 4 to 8).

37. Figure 1 of the '146 patent depicts a two-piece embodiment. (CX 2).

38. The '146 patent claim 1 is directed by its terms to a one piece on-car brake lathe as shown in Fig. 2 of the patent. The clause "means for attaching, etc" as stated in the '146 patent claim is the attachment arm 7 of Fig. 2 of the '146 patent drawings. This is described in the '146 patent beginning at column 2, line 23. (Parks, CX 194 at 7).

39. A dismantled brake yoke is also known as the caliper. (Hooper, Tr. at 249, 250).

40. The mounting point for a dismantled brake yoke as described in the '146 patent is called the spindle. (Willey, Tr. at 175, 176).

41. A spindle is a non-rotating component that is attached to the frame of the automobile, holds the rotating components of the wheel and centers those components on the axle. (Willey, Tr. at 148; Kirk, Tr. at 336, 337; CX 194, Exh. 2).

42. The mounting bores ("holes") for a dismantled brake yoke ("brake caliper") are located on the spindle. (CX 194, Exh. 2; Willey, Tr. at 149).

43. Attached to CX 194 as Exhibit 2 is a photograph of a spindle for a

automobile. (Willey, Tr. at 148).

44. The spindle is also known in a front wheel drive as the bearing hub assembly. (Willey, Tr. at 148).

45. The spindle holds the rotor and centers it on the axle. (Willey, Tr. at 148, lines 15-17).

46. The relationship of an on-car brake lathe to the spindle is important to properly machine the rotor. (Willey, Tr. at 148, 149).

47. The brake yoke on the wheel assembly attaches to the spindle through bore holes provided in the spindle. (Willey, Tr. at 149).

48. In Figure 1 of the '146 patent element 7 can be solidly attached to perform a support function. (Willey, Tr. at 136).

49. The attachment arm 7 in Figure 1 of the '146 patent, serves to support the tool holder by suspending it from the bore holes for a dismantled brake yoke or caliper brake. (Parks, Tr. at 275, 276).

50. Element 7 in Figure 1 of the '146 patent is a supporting member which, if disconnected, would permit the cutting head to fall to the floor. (Willey, Tr. at 139).

51. The '146 patent claim 1 is directed by its terms to a one piece on-car brake lathe as shown in Fig. 2 of the patent. The clause "means for attaching, etc." as stated in the '146 patent claim is the attachment bar 7 of Fig. 2 of the '146 patent drawings. This is described in the '146 patent beginning at column 2, line 23. (Parks, CX 194 at 7).

52. Figure 2 of the '146 patent depicts a one-piece embodiment. (CX 2).

53. An "attachment arm 7" as described in the specification is depicted in both of the figures of the '146 patent. (CX 2, Figs. 1-2).

54. The first definition of the word "clutch" in the Random House College Dictionary, and the Webster College Dictionary (RX 43-44) refers to gripping or holding something, while the technical definition of a "clutch" is the fourth definition. The definition in the '146 patent of the term "clutch" comports with the first dictionary definition of "clutch," i.e., gripping or holding something. (RX 43-44).

F. Patent Office Prosecution of the '146 Patent and Lathe Devices

55. In the first Office action of April 13, 1979 all of the original claims 1 to 5 were rejected. Original independent claim 1 and claims 2, 4 and 5, dependent on claim 1, were rejected over German patent 2,540,187 to Mossel. Original claim 3, dependent on claim 1, was rejected on insufficient structure recited to support claimed functions and as indefinite and incomplete (CX 191).

56. Original independent claim 1 read:

1. A portable lathe device, intended primarily for returning of brake discs and of the type incorporating a portable driving device, which is adapted to rotate the brake disc via a clutch device, when the brake disc is still mounted on the wheel shaft and from which brake disc the wheel has been dismantled, the lathe device furthermore incorporating a tool holder arranged adjacent the driving device and provided with feed means, wherein the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle, and with two individually adjustable lathe tools intended one for each side of the brake disc and is adapted to be moveable radially relative to the brake disc.
[Emphasis added]

As seen from the above the original claim 1 had the recitation "wherein the tool holder is equipped with means for its attachment to the mounting points for the dismantled brake yoke in the vehicle." (CX 191).

57. Original dependent claim 3 read:

3. A lathe device according to claim 1, wherein the clutch device incorporates a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned.

58. In an amendment dated July 10, 1979 original claims 4 and 5 were cancelled and claims 1, 2 and 3 were amended. The "Remarks" section of the amendment stated in part:

Claims 1, 2, 4 and 5 were rejected under U.S.C. 102 over the German Patent [2,540,187]. Claim 1 is hereby amended more clearly to define over the teachings of the German Patent, namely by recitation of a supporting arm rigidly connecting the tool holder of the device with the driving device to form an integral portable unit.

The German Patent has a portable driving device for rotating a disc brake and a tool holder having two individually adjustable tools. The driving unit and the tool holder are not however interconnected by a supporting arm as now defined in amended Claim 1. In the German arrangement the two units are connected by the rods of the wheel suspension but this means that it is necessary to make a very accurate and time wasting alignment of the two units before operation thereof. It is furthermore in practice almost impossible to obtain such a perfect mounting in all positions which is necessary for obtaining a satisfactory turning result. A possible bearing slackness in the wheel will furthermore result in an unsatisfactory machining of the disc since the risk for non-parallel mounting is high. By integrating the driving device and the tool holder, in accordance with revised Claim 1 of the instant application it is ensured that the turning of the disc will be made with the greatest possible precision as to parallelism. The drawbacks outlined in connection with the German device are therefore substantially eliminated. It is a further advantage of the device in accordance with the instant invention that the integral unit is more easily handled [Emphasis added].

(CX 191).

59. Amended claim 1 read:

1. A portable lathe device, intended primarily for returning of brake discs and comprising a portable driving device including a drive member and a clutch

device connected with said drive member, means for attaching said clutch device to a brake disc for rotation of the disc when still mounted on a wheel shaft and from which brake disc the vehicle wheel has been dismantled, a tool holder adjacent the driving device and provided with feed means, means for attaching said tool holder to the mounting points for a dismantled brake yoke, said tool holder including two individually adjustable lathe tools intended one for each side of the brake disc and said tool holder being moveable radially relative to the brake disc and a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit. [CX 191]

60. Amended dependent claim 3 read:

3. A lathe device according to claim 1, wherein the clutch device incorporates a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned, said centering device comprising a rotatable disc for mounting to the brake disc, guiding means for aligning the rotatable disc with the brake disc and clamping means for locking the rotatable disc and the brake disc in aligned positions. [CX 191]

61. In a second Office action dated September 28, 1979,

Claims 1 and 2 are rejected as being unpatentable over Mossel in view of Basseti [Italian patent 472,238 to Basseti] under 35 U.S.C. 103. It is considered to be an obvious expedient to mount a motor drive means at 5 and 6 and connect it to the tool slide both as taught by Basseti in Figs. 1 and 2.

Claim 3 is objected to as depending from a rejected claim but is considered to be allowable if amended to include all the limitations of the parent claim.

(CX 191).

62. An amendment dated December 18, 1979 cancelled amended claims 1 and 2 and in addition amended claim 3. Amended claim 3 corresponds to the claim in issue. It was represented that the Examiner had indicated that claim 3 is allowable as presently amended and that the present amendment includes all the limitations of the parent claim 1 and has been additionally amended to put

claim 3 in independent form and to correct the syntax of the claim. (CX 191).

63. By action dated January 28, 1980, the Examiner stated that amended claim 3 was allowable and a notice of allowance was mailed on March 13, 1980. (CX 191).

64. Disc brakes were around and were getting lathed before the device claimed in the '146 patent was in existence (Hooper, Tr. at 205).

65. Hooper testified as to other devices for cutting front wheel drive disc brakes:

Q What did they use before your machine existed to cut front wheel drive disc brakes?

A There's been a two piece unit out at, that it's, Quickway has made one that is bolted directly to the caliper support bracket. There was a grisly grinder that came out of Canada, that Bear Corporation tried to -- two piece.

It was designed, I'm going to explain two piece. The quick way was a lathe that bolted to the caliper support bracket. But later they came up with an adapter, that would hook to a half inch drill to turn the wheel instead of the motor.

Because it was more consistent when a car came in cold. And it was supposed to be run at a certain RPM's. The choke was cold, and the car would run faster, and you couldn't get a consistency of cuts.

So Quickway designed a unit to go to a half inch drill, so you could use the half inch drill, that would turn the same RPM's all the time. It was not a very big success. But they did, it was available.

And then Honda had a trapped rotor. And Honda came up with one of their own that still in existence that you start the car up, and it's very similar to the Quickway. It's similar to the Acuturn.

There is numerous brake lathes. But before, there was only one, and that was the Quickway.

Q Now, even today, I think, would you agree that it's safe to assume that every mechanic in the country does not own either a Hunger or a Pro-Cut machine. Isn't that a safe assumption?

A That everyone does not, yes.

Q Okay, so, would it also be a safe assumption to say that some people today are still lathing disc brakes using a bench mounted lathe?

A Yes, they are.

66. Hooper testified as to prior art lathes (Tr. at 199 to 201):

Q I understand, so then with respect to rear wheel drive cars, the on car disc brake lathe and the conventional bench mounted lathe work, somewhat sim, work to a relatively similarity?

A Okay. When you have, when you dismount a rotor from a rear wheel drive car, you have bearing cups. In the rotor. Those bearing cups work as a centering device when you use a bench lathe and do a good job.

It won't make it as accurate as an on the car, because you can actually see and compensate with CPX4 and CPX5. But. As far as cutting it square, to the bench lathe, it will do it.

When you remove a rotor from a front wheel drive car, you have no studs, you have no lug nuts. And you have to rely on the college that you use, to try to hook, to mount this particular rotor, on a bench lathe, with no bearing cups.

I mean, you just, it's a very small surface that you touch. And numerous times I worked with engineers. And it's just, it's just not accurate.

I mean, I'm no engineer, but I sure work with them for eight, from Delco Marine down.

JUDGE LUCKERN: But would you say they were similar? I think the question was whether they're similar or not.

THE WITNESS: Well, similar. Do they perform the same function? Yeah, they both cut the rotor.

One will, like I say, one you can't compensate for the stock tolerances of the vehicle. Where you can compensate with CPX4 [domestic device] and 5 [accused device] here.

A bench brake lathe. Sometimes they say, that if you measure it on the car, and try to create that same run out situation on a bench lathe, that it works.

Well, we tried that. And it's been done. And it used to be said to do it. But if someone ever tried it, you can't do. I mean, you would see.

JUDGE LUCKERN: So your answer would be, no, they're not similar.

THE WITNESS: They're, well, I'll tell you. I mean it's like --

JUDGE LUCKERN: If you can answer it.

THE WITNESS: I don't, really the, you know, I mean. It's like saying is a Ford similar to a Cadillac?

Yeah, they got four wheels, and they do the same. But you know, the price tag is a little different, and the ride's a little better.

JUDGE LUCKERN: Fine.

THE WITNESS: So, my, when you say similar, that, those two machines cutting them on the car is much better than a bench lathe.

(Hooper, Tr. at 201-03).

67. Prior to complainant providing the patented lathe, there were bench lathes by companies like Ammco and two piece caliper lathes by companies like Kwik-Way. (Hooper, CX 192 at 7).

68. There was basically no market acceptance for complainant's lathe when complainant started to sell the product in 1989 (Willey, CX 19f at 5).

G. Adverse Inferences

69. Respondents intentionally copied all of the primary components of the '146 patent. (Order No. 42, Adverse Inference A).

70. Respondents attempted to produce a portable on-car brake lathe but were unable to do so prior to learning of the invention disclosed in the '146 patent. (Order No. 42, Adverse Inference B).

71. Respondents have sold significant quantities of its accused product and will likely continue to do so in the future. (Order No. 42, Adverse Inference C).

72. The industry has well accepted respondents' accused products which are an advance over prior bench-mounted or two-piece brake lathe machines. (Order No. 42, Adverse Inference D).

73. The invention disclosed in the '146 patent is an improvement over respondents' designs prior to the issuance of the '146 patent. (Order No. 42, Adverse Inference E).

74. In the past, respondents' accused device has included a post attached to the tool holder that could be used to connect the tool holder to the mounting points of a dismantled brake yoke. (Order No. 42, Adverse Inference F).

75. In an earlier design, respondents used an attachment arm as called for by the claim of the patent. In a later design, respondents removed the attachment arm and replaced it with its current floor stand. Certain of the functions performed by the original attachment arm are now performed by the current floor stand. Respondents believed that the floor stand is a substitute for the attachment arm. (Order No. 42, Adverse Inference G).

76. Respondents believe that the floor stand or support rod of the accused products operate to prevent rotation of the on-car portable brake lathe. (Order No. 42, Adverse Inference H).

H. The Accused and Domestic Devices

77. Complainant's on-car brake lathe works as follows: one first removes the wheel from the car and the brake caliper from its support and set the caliper aside. Next, the clutch adaptor is attached to the rotor using the automobile lug nuts. Once that is tightened up to about forty foot pounds, then one screws the lathe to the adaptor. Then the user locks the lathe down by tightening the handle on the stand or by using the floor stand to keep the lathe from rotating. Once this is attached, then the user turns the lathe on to see if there is any side to side movement in the lathe, the side to side movement in the lathe will indicate there's run-out in the system

that has to be removed. Run-out is almost always there, 90-95% of the time. At this point the user stops the lathe and attaches the dial indicator to the lathe, touching a stationary point on the car to measure the side to side movement of the lathe. Once the user locates the high spot and the low spot on the rotor, he adjusts the high point or the low point run-out screws to remove the runout. The user can then turn the lathe back on and the user can view the dial indicator to determine whether the run-out has been removed to an acceptable level. If necessary, the user can stop the lathe and readjust it again. Usually runout can be removed on the first attempt by an experienced operator. Once the run-out is removed, the user removes the dial indicator set up, takes the cutting head and centers it on the rotor using one of five adjusting holes to position the heads on either side of the rotor. The user then cranks the heads half way toward the center of the rotor by pulling the feed handle out and winding it in to the center of the rotor, and next adjusts each head inward to make them touch on each side of the rotor. Thereafter the user cranks the heads all the way in to where the user wants to begin the cut. The user then sets the depth of cut, tightens the cutting arms down and starts the lathe on its automatic cutting cycle. The cut proceeds automatically from there, cutting right through until it reaches the micro switch at the end of the rotor which will shut off the lathe automatically. One cut is all that is required and the microfinish will be somewhere in the range of 23 microns which is better than any other lathe on the market. The difference being whether its 20 or 40 depends on the manufacturer of the rotors. Some are harder than the others. Once this is done, then the user disconnects the lathe, removes the adaptor, moves it to the other side of the car and refinishes the rotors on that side. (Willey, CX 196, at 6-8; Hooper,

CX 192, at 3-5).

78. The use of complainant's on-car brake lathe is demonstrated in a videotape marked as CX 196 and CPX 6. (Hooper, CX 192 at 5).

79. The structure to which the caliper in an automobile brake system is mounted i.e. the portion of an automobile that attaches a stationary shaft to the framing of the automobile, can be called a spindle. The spindle is the place where the brake calipers are attached to produce a braking force to bring an associated vehicle to a stop (Kirk, Tr. at 336, 337).

80. The spindle provides the total reference point for the positioning and functioning of the on-car brake lathe (Willey, Tr. at 158).

81. A spindle is the structure which supports and receives the brake yoke. (Hooper, Tr. at 252).

82. There are holes in both the brake yoke and in the spindle to receive the bolts for a brake yoke. (Hooper, Tr. at page 252, 253).

83. A brake yoke is a structure which holds the brake pads in an automobile. It does not remain attached to the automobile during use of complainant's on-car brake lathe. The brake yoke responds to pressure from the master cylinder to squeeze the pads together to provide a braking function for the vehicle. (Hooper Tr. at 231, 250).

84. The clutch adapters of the accused device are bolted to the studs that are on the bearing hub or on the rotor that is attached directly to the spindle because the studs that go through the rotor and/or hub are part of the spindle. (Willey, Tr. at 149, 158; Hooper, Tr. at 253, 254; Kirk, Tr. at 338).

85. Complainant's dolly has a locking mechanism in the form of a ratchet locking handle at the rear of the top of the dolly. (Hooper, Tr. at

243).

86. Respondents' dolly has a locking mechanism in the form of a rotatable knob in the middle of the dolly. (Hooper, Tr. at 243).

87. CPX 4A is not normally shipped with complainant's lathe unless it is requested. (Hooper, Tr. at 210).

88. Complainant does not charge anything additional for CPX 4A when requested. (Hooper, Tr. at 210).

89. CPX 4A attaches to the bottom of complainant's tool holder in a screw-down bracket. (Hooper, Tr. at 211 to 213).

90. The anti-rotation post, sometimes called a vertical support rod, for complainant's on-car brake lathe is a silver colored rod about 3 1/2 feet long and adjustable in length. (Willey, Tr. at 132, 133).

91. Complainant's on-car brake lathe may be prevented from rotating using the vertical support post provided with the lathe. (Hooper, Tr. at 256).

92. CPX 4 includes a ratchet locking handle on the rear of the mounting trolley, which prevents rotation of the brake lathe. (Hooper, Tr. at 243, 256).

93. The vertical support rod is not used at the same time the mounting trolley is used with complainant's on-car brake lathe. (Hooper, Tr. at 242).

94. The mounting trolley performs the same purpose as the vertical rod in CPX 4. (Hooper, Tr. at 242).

95. The clutch adapter of complainant's on-car brake lathe is a black five hole structure which bolts onto the lug-nuts of the vehicle. (Hooper, Tr. at 253).

96. The clutch adapter of complainant's on-car brake lathe attaches to

the lug-nuts of the rotor on a rear wheel drive car and attaches to the lug-nuts of the bearing hub assembly on a front wheel drive car. (Hooper, Tr. at 253, 254).

97. The lathe body is attached to the clutch adapter. (Hooper, Tr. at 254).

98. The lathe body of complainant's on-car brake lathe is colored blue. (Hooper, Tr. at 254).

99. The tool holder of complainant on-car brake lathe is attached to the lathe body. (Hooper, Tr. at 254).

100. The clutch adaptor in the accused on-car brake lathe is directly connected to the spindle. (Willey, Tr. at 157, 158).

101. With respect to accused device, once the universal flange is attached to the disc brake rotor studs through means of the centering fingers, the mounting trolley can be removed and is no longer required, provided an anti-rotation device is used. (Kirk, Tr. at 356, 357).

102. If the accused device is attached only to the disc brake rotor and put into operation, the entire device rotates. (Kirk, Tr. at 356, 357).

103. The vertical support post in the accused device is an element which is about 3 1/2 feet long, and adjustable as in the case of the vertical support post on complainant's lathe. (Willey, Tr. at 142).

104. The support post in the accused device has a "Tee" towards the top and is a metallic black color. (Willey, Tr. at 142).

105. The rotation of the lathe during operation with respect to the axle of the automobile is undesirable. (Kirk, Tr. at 357).

106. There are no substantial differences between the on-car brake lathe manufactured by complainant and the accused on-car brake lathe devices.

(Willey, CX 196 at 28).

107. The accused on-car brake lathe marked as CPX 5 includes a locking device to prevent the lathe from rotating in the form of a black knob in the middle of the mounting trolley. (Hooper, Tr. at 243).

108. The dark gray vertical rod associated with CPX 5 is not used at the same time as the locking knob of the mounting trolley of CPX 5. (Hooper, Tr. at 243, 244).

109. Once the accused device is placed in position and locked, and the anti-rotation rod is attached, all of the weight of the device is carried by the spindle. (Kirk, Tr. at 357).

110. The vertical support post of the accused device has the purpose of preventing rotation of the accused device during use. (Kirk, Tr. at 358).

111. Operation of the accused on-car brake lathe is illustrated in the Hunter "Operating Instructions Model BL300 on-car rotor lathe." (Parks, CX 194 at 10).

112. Respondents do not contest that the accused device includes a portable lathe device intended primarily for returning of brake discs. (Amended Response, CX 37, at the Claim Chart).

113. Respondents do not contest that the accused device includes a portable driving device including a drive member. (Amended Response, CX 37, at the Claim Chart).

114. Respondents do not contest that the accused device includes a centering device adapted to ascertain that the driving device and the brake disc shafts are aligned. (Amended Response, CX 37, at the Claim Chart).

115. Respondents do not contest that the accused device includes a rotatable disc for mounting to the brake disc. (Amended Response, CX 37, at

the Claim Chart).

116. Respondents do not contest that the accused device includes guiding means for aligning the rotatable disc with the brake disc. (Amended Response, CX 37, at the Claim Chart).

117. Respondents do not contest that the accused device includes tool holders adjacent the driving device and provided with feed means. (Amended Response, CX 37, at the Claim Chart).

118. Respondents do not contest that the accused device includes two individually adjustable lathe tools intended one for each side of the brake disc. (Amended Response, CX 37, at the Claim Chart).

119. Respondents do not contest that the accused device includes a tool holder being moveable radially relative to the brake disc. (Amended Response, CX 37, at the Claim Chart).

120. Respondents do not contest that the accused device includes a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit. (Amended Response, CX 37, at the Claim Chart).

121. Both the accused and complainant's on-car brake lathes include a clutch device as that term is defined in the '146 patent specification in column 2, line 32, et seq. This clutch device includes a centering feature and the clutch device in the accused lathe provides for attachment of the clutch to the brake disc through a centering plate 51. (Parks, CX 201 at 3, CX 5 at 5).

122. The accused lathe further includes self-centering cranks (53) and clamping means in the form of nuts (M) and studs (R) for locking the rotatable disc and the brake disc in an aligned position as called for in the '146

patent claim. (Parks, CX 201 at 3).

123. Complainant's on-car brake lathe includes a clutch device as disclosed and claimed in the '146 patent, and which is identified in Exhibits 8 and 9 of the complaint as item 1. (Parks, CX 201 at 3-4, CX 9, 10).

124. In Figure 1 of the 146 patent, the tool holder is suspended by attachment arm 7. (Parks, Tr. at 277).

125. The connection element CPX 4A is no longer used in the United States. (Willey, CX 196 at 26).

126. Complainant's on-car brake lathe, marked as CPX 4, attaches to the spindle through the clutch assembly by the studs of the bearing hub assembly or the rotor. (Willey, Tr. at 149).

127. The accused device marked as CPX 5 attaches to the spindle through the stud holes in the clutch adaptor. (Willey, Tr. at 150).

128. The tool holder on CPX 4 is a black member having wheels on the top and backsides thereof. (Willey, Tr. at 151).

129. Both complainant's on-car brake lathe brake device and the accused device utilize a mounting trolley or anti-rotation post to prevent rotation of the lathe during use. (Willey, Tr. at 152).

130. The mounting trolley on complainant's device is detachable from the lathe during use and can be removed. (Willey, Tr. at 154).

131. By tightening the black handle directly in line with the round handle on the lathe of CPX 4, the mounting trolley stops the rotation of the lathe during use. (Willey, Tr. at 156, 157).

132. The anti-rotation post for complainant's on-car brake lathe is a silver colored rod about 3 1/2 feet long and adjustable in length. (Willey, Tr. at 132, 133).

133. The '146 patent discloses "a clutch device 4 designed as a mounting plate, etc.," as described in column 2 of the patent which corresponds to the clutch adapter or mounting flange of the physical devices subject to this investigation. (Parks, CX 201, at 3-4; CX 2).

134. The accused portable brake lathe does have a clutch device as that term is explained at column two of the '146 patent and also has a clamping means and means for attaching the clutch device to a brake disc as disclosed in the '146 patent. (Parks, CX 201, at 4-5).

135. Complainant's lathe weighs approximately 54 pounds. One use of a trolley is to get the lathe over to the vehicle that is to be serviced. (Willey, Tr. at 153).

136. The trolley and anti-rotation post can be used to prevent rotation in both the accused product and the domestic product. (Willey, Tr. at 153).

137. Respondents admit that their products have a so-called "universal adapter" that incorporates a "centering plate" and "centering cranks." (RX 1, tab 6 (claim chart)).

138. Kirk, in his claim chart, concedes that the accused products have a "centering means." (RX 1, tab 6 at 1).

139. The respondents admit that their mounting plate is aligned with the brake disc and then mounted to the hub using the wheel lugs and nuts ("R" and "M") and "centering plate" (51). (RX 1, tab 3, tab 6, p. 5/1).

140. Respondents admit that their products have a "clamping means." (RX 18).

141. The FIG. 1 embodiment of the '146 patent does not consist of pieces that are joined together, viz. the driving device (item 1) is not joined to the tool cutting device which in FIG. 1 is the structure that is

hung off of the attachment arm 7 that is connected to the disc mounted brakes holes by bolts (item 8). (Kirk, Tr. at 341, 342).

142. The '146 patent discloses that one of the mounting points on the vehicle for the patented lathe consists of the mounting holes for a dismounted brake yoke or caliper (Kirk, Tr. at 330). Kirk in support of this testimony relies on the claim language "means for attaching said tool holder to the mounting points for a dismounted brake yoke" (Kirk, Tr. at 331). Kirk also relies on the language of the '146 specification, referring to FIG. 2, which states at col. 2, line 37ff "[o]ne end of an attachment arm 7 is by means of bolts 8 attached to the bores for the brake yoke which according to Kirk are references to the "mounting points for a disc mounted brake yoke" in claim 1 (Tr. at 331, 332). Kirk also relies on the language of the '146 specification, referring to FIG. 1 and FIG. 2 at col. 3, lines 9ff which state that FIGS. 1 and 2 work mainly in the same manner and teach that "the attachment arm 7 is fitted to the bores for the brake yoke" (Tr. at 332, 333). The foregoing was the basis for paragraph 8 of Kirk's affidavit (RX 2) which read:

8. The device described by the '146 Patent is designed only for on-car use, to machine disc brakes, and teaches attachment to the dismounted brake yoke holes. The device also requires use of various different interchangeable flanges to accomplish mounting to the brake disc.

(Tr. at 333).

143. Attachment arm 7 is identified in the '146 patent (at col. 3, lines 11 to 15), and with respect to the FIG. 1 and FIG. 2 embodiments as being connected via bolts to locations on the disc mounted brake yoke holes. Thus bolts go into the brake yoke holes and to Kirk the teaching of the '146 patent "is very clear to me, that you have to make an attachment to those

holes by putting a physical attachment arm 7 into them" (Tr. at 339, 340). In addition to what Kirk referred to in the previous finding, to support his view that said physical attachment is necessary, Kirk makes reference to col. 2, lines 7ff of the '146 specification, which with reference to FIG. 1 states that "[t]he brake yoke with the brake shoes and the brake pistons have been dismounted from the wheel and on attachment arm seven has thereupon by means of bolts 8 been fixed in the bores intended for fitting of the brake yoke" (Tr. at 340, 341).

144. With respect to the accused CPX 5, Kirk testified:

Q Dr. Kirk, referring to CPX 5, which is a Hunter Hunger machine right beside the Pro-Cut machine.

* * *

Q In your opinion, is there anything attached to the two [sic] holder that can be attached to the bores of a dismounted break yoke?

A Absolutely, positively, nothing, zero, nothing.

JUDGE LUCKERN: What is the basis for that? . . .

* * *

THE WITNESS: What I'm looking for, to answer your question, is something that has holes in it which will be able to go and attach to the dismounted brake yoke holes by means of inserting bolts 8 into those holes.

I'm looking by the '146 teachings, to see something on the end of the Hunter/Hunger BL 300 which has holes in it. There is nothing at the end of the Hunter/Hunger BL 300 which has holes in it, so there is nothing that is attachment arm 7 that will let me go and make any physical connection, no physical connection that I can see to the dismounted brake yoke holes.

* * *

THE WITNESS: ...

The cylinder on the outside lateral surface of the cutting tool

slide is not in any way, shape or form, adapted to make connection to the disc mounted brake yoke holes.
The cylinder on the outside lateral surface of the tool slide is not adapted in any way, shape or form, to make connection to the disc mounted brake yoke holes.

JUDGE LUCKERN: Why do you say that? What's your basis for saying that?

THE WITNESS: Well, Your Honor, this is a cylinder. What I'm looking to pick up is two holes which are located on the spindle and do now move.

JUDGE LUCKERN: The spindle of the automobile?

THE WITNESS: Spindle of the automobile which is not part of the Hunter lathe. So somehow, I have to take a round surface with a hole in it and put two bolts into two holes, which are located on the spindle.

And there are no parts, nor is it the intent of this machine, the Hunter Machine, shown in CPX 5, there is no intent that this machine has any need whatsoever to pick up those mounting holes for its proper operation.

There is no need for that to occur. It does not occur.

(Kirk, Tr. at 348-50, 354).

145. With respect to complainant's CPX 4, Kirk testified:

Q In your opinion, would you go through the same discussion with respect to the Pro-Cut machine?

JUDGE LUCKERN: Wait a minute. Is there a use of the dolly taught in the '146 patent, to your knowledge?

THE WITNESS: No, Your Honor, there is not

* * *

BY MR. COCKBURN:

Q Is there an attachment arm, or means for attaching said tool holder to the mounting points for a disc mounted brake yoke on Complainant's machine, CPX 4?

A No, there is not in CPX 4 any means for attaching the structure known as the brake lathe, to the disc mounted brake yoke holes at all -period.

Q However, if I were to --

A I'll do that.

JUDGE LUCKERN: You'd better say for the record what you just did.

MR. COCKBURN: We have just attached CPX 4A to CPX 4.

THE WITNESS: Yes, you did do that. Now you have attached a device to the underside of the tool slide on CPX 4, and I want to point out that this device, CPX 4A was not present -- it's the first time I've seen this device; it was not present in my inspection of CPX 4, the Pro-Cut lathe, when I looked at it.

And you can look at all my photos in the book and all my photos show what I saw. I did not see that device.

But answering your question, when you put this device in here, so far, it hasn't done anything more than extend beyond the lateral surface of the end of the tool slide.

So, your question, now that I understand what you've done is? I probably lost track of it.

Q Now, in your opinion, would CPX 4 [sic] be an equivalent to the attachment arm, as specified in the '146 patent?

A Absolutely not. And my reason for that is, look at this CPX 4A device that you just put on there. Show me, rhetorically speaking, could you show me, can I find any holes that will be able to accommodate bolts that will go into the disc mounted brake yoke holes?

The answer is, no, you can't find those.

Is there any way that this structure that you've shown me in CPX 4A is capable of accomplishing the teachings in the '146 patent?

Absolutely not. I'm a mechanical engineer. If you try to hang the weight of this 55 pound lathe off this structure, CPX 4A, assuming you could somehow get it to connect to the disc mounted brake yoke, it's going to bend and sag and hit the floor.

(Kirk, Tr. at 360-63).

146. Parks testified as to the attachment bar 7 that the '146 patent claim 1 is directed by its terms to a one piece portable brake lathe as shown in FIG. 2 of the patent; and that the clause "means for attaching, etc." as stated in the '146 patent claim is the attachment bar 7 of FIG. 2 of the '146

patent, which is described in the '146 patent beginning at col. 2, line 23.
(CX 194 at 7 to 8).

147. Parks, as to the accused device and the FIG 2 embodiment of the '146 patent, testified:

... In the Ekman '146 specification, the rotation is reacted by attachment of the tool holder to the automobile wheel support bracket that has threaded bores to normally receive bolts to mount a brake caliper. The automobile in turn is in fixed relationship to the ground through a lift. In the Hunger/Hunter portable brake lathe, the final degree of rotational freedom is reacted by a support leg extending between a ground surface and the portable brake lathe or a mounting stand extending between a ground surface and the portable brake lathe.

(Parks, CX 194 at 14, 15).

148. Parks, in his witness statement (CX 194) last page in comparing item (i) and item (1) of the claim in issue with the accused device, states:

<u>Claim 1</u>	<u>Accused Device</u>
(i) means for attaching said tool holder to the mounting points for dismantled brake yoke,	means for attaching the tool holder to a brake is provided through the unitary connecting arm (3) and the mounting of the device to the brake assembly through disc (50), and through support stand (60) and anti-rotation post (21),
* * *	
(1) a supporting arm rigidly connecting said last holder with said driving device to form an integral portable unit.	a supporting arm (3) rigidly connects the tool holder assembly to the portable motor unit to form an integral portable unit.

Thereafter Parks testified at the hearing, with respect to what he said above as to the accused device and item (i):

A I would perhaps -- I think it probably a better reading -- to make it clearer in the context might be to say "or" antirotation post 21. That word might make it more clear.

But I meant that "and" in the sense that -- that both of them -- A and B -- that is, the support stand 60 and the antirotation post 21 serve the antirotation function.

So perhaps the wording is not optimal, but that was the meaning.

JUDGE LUCKERN: But let me make sure I understand you. What you say right now is that the line that says "(60) and antirotation post" -- based on what you just said now, perhaps a better way would be (60) or antirotation post"?

THE WITNESS: I think that perhaps that would be a more -- a clearer wording that would convey the sense that either the support stand or the antirotation post provide the function of suppressing rotation.

JUDGE LUCKERN: All right.

THE WITNESS: So they are not both required.

(Parks, Tr. at 286-87).

149. With respect to the preceding finding Parks made reference to the following drawings of the accused device, with the circled references being to numbered parts in the accused device (CX-194):

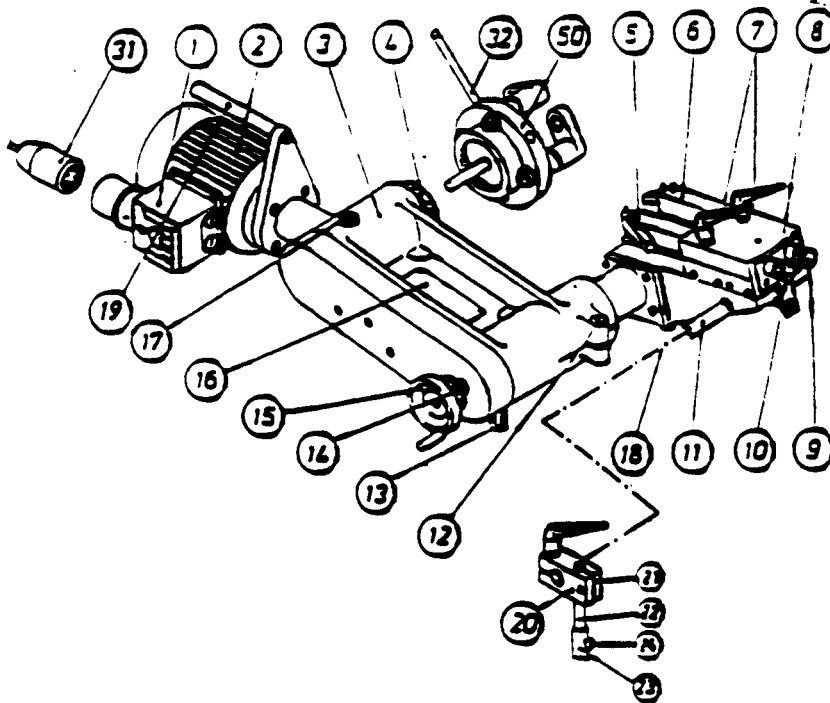
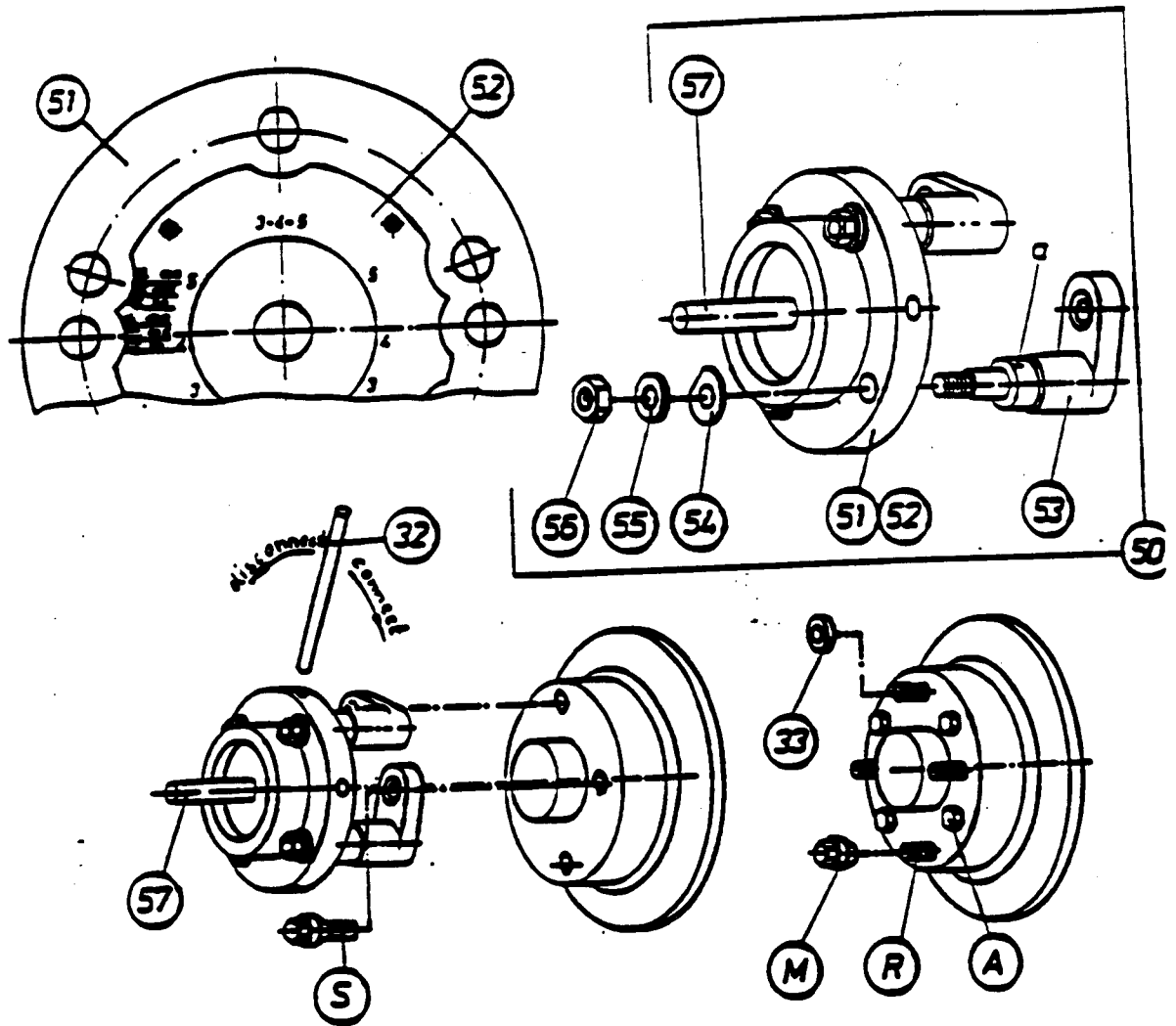


Exhibit 3

5. MOUNTING THE MACHINE ON THE VEHICLE

5.1 Universal mounting flange

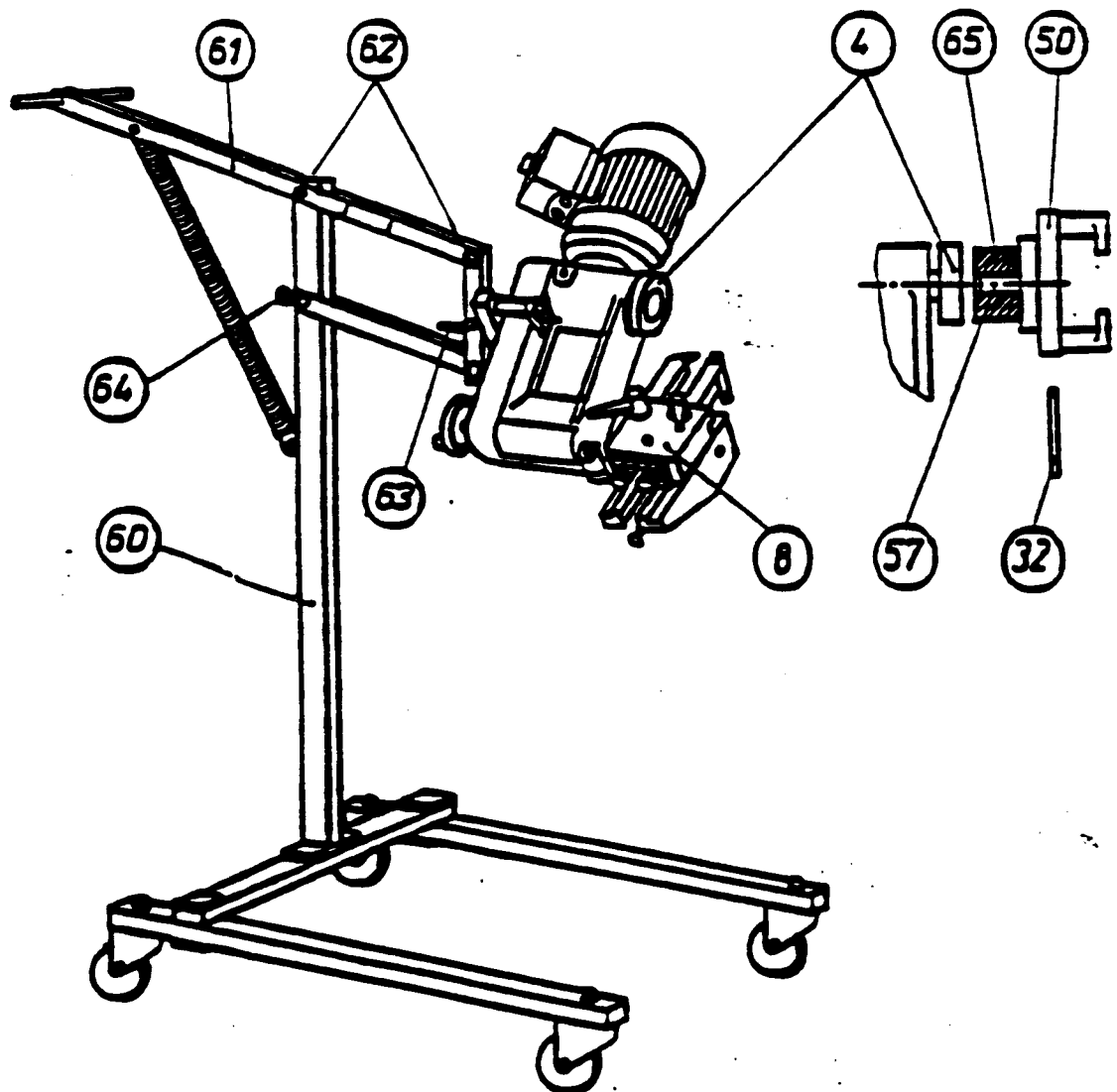


<u>Item</u>	<u>Description</u>	<u>Item</u>	<u>Description</u>
50	Universal mounting flange Part no. 326.17.120	32	Tommy bar (standard accessory) Part no. 326.10.110.01
51	Centering plate	33	5 Spacing washers (standard accessory) Part no. 326.10.110.02
52	Graduated dial	M	Wheel nut
53	Centering crank	R	Wheel stud
54	Disc spring	S	Wheel bolt
55	Washer		
56	Hexagon nut		
57	Locating pin		

Type E 326a

5. MOUNTING OF THE MACHINE ON THE VEHICLE

5.5 MOUNTING WITH MOUNTING SCHELLEY



150. Parks testified as to an equivalent structure:

Q Is it still your opinion that what you just described as an equivalent structure -- meaning body and stand, or body and support rod, works in the same way as an attachment arm?

(Pause.)

THE WITNESS: Yes. I believe so.

(Pause.)

BY MR. COCKBURN:

Q How does it work in the same way? Other than the fact that they both resist rotation?

A Well, the they are both passive rotation resisters. They both generate a torque which is applied to the both [sic] of the lathe, to counter the other torque, which is basically being transmitted to that body of the lathe through basically the worm drive, or from the shaft.

The way to counter a torque is to apply either a concentrated torque directly or to have a force acting at a distance. And in the case of the post, it's very clear that the mounting point of the post is located a non-zero radial distance off the axis of rotation of the lathe.

And moreover, that the -- when mounted in a vertical position, the compressive force generated in that post generates a non-zero torque about it.

The same thing can be said that for an attachment arm made directly between the tool holder and the caliper, namely that the directionality of the connection between the mount at the tool and the mount on the spindle is also has a -- that direction is off-axis with respect to the axis of rotation, which is free, and therefore, any tension force, or compressive force, which is generated in a member such as 7 would also generate the countering torque.

And it's just that way.

Q But isn't it correct that the structures are different? The floor dolly or floor stand versus the support post versus the attachment arm?

A They are different structures, yes.

Q Very different?

A They all -- there is no way to generate a countering torque but to generate a countering torque. That's the only way to generate -- to stop a rotation. And the way to do that is a force acting at a distance.

The same thing can be said by the wheels of the dolly. They also are off-axis with respect to the axis of rotation, and therefore, generate a torque.

Q But isn't your answer more going to the function rather than the way that it's done -- i.e., the function of resisting rotation versus how it is done in the device?

A Well, they are the same. I mean, it's done through a passive member. I mean, for example, there is no active torque sensing to generate countering torques or other methods -- those would be different ways.

In each case, the way is simply introducing a passive member which is capable of generating a torque by means of its geometrical location with respect to the axis of possible relative rotation.

Q In other words, Dr. Parks, isn't it correct I could drop a column from the ceiling to the top of the lathe body and firmly secure it and that would also resist rotation?

A It would.

Q And you would say -- you would also say that that's the same way, just as you say that the body is the same as the support rod is the same as an attachment arm?

A I think so. I think it's -- you generate a force at a distance; you get a torque.

(Parks, Tr. at 287-90).

I. Domestic Industry

1. Complainant's Production

151. Beginning in November 1990, Pro-Cut (through its subcontractors) commenced domestic production of certain components of their disc brake lathes in the United States and thereafter began assembling those components and imported components to create its disc brake lathe. (J. Dore, RPX 1 at 32; Willey, CX 196 at 9-13).

152.

Since that time, complainant has only imported certain components of the lathes, with the number of and importance of these imported components declining over time. (J. Dore, RPX 1 at 36; Willey, CX 196 at 15-16; Willey, Tr. at 101-102; CX 76).

153.

154. The lathes sold by complainant during 1993 were predominantly made by Micro Precision, Inc. (MP), except for the bodies, which were produced in Sweden. (Willey, Tr. at 101).

155.

156.

157.

158.

159. The Summer 1993 Pro-Cut Newsletter announced that complainant had commenced production of VBG lathes in the United States through a "series of supplier contracts and relationships." (CX 75 at 1).

160. The trademark "VBG" appears on the black plastic surface of complainant's lathe. (CPX 4).

161. VBG Produckter AB (VBG) granted complainant the right to use its "VBG" trademark on its lathes, printed material, exhibitions and advertising. (CX 72, Sec. III.1 at 3).

162.

163. Complainant currently receives nothing from VBG, but ships a majority of lathe parts to VBG.

(Willey, CX 196 at 14-15).

164.

165.

166.

2. Complainant's Employment of Labor

167.

168.

169. James Dore, complainant's Treasurer, testified in his deposition that

3. Complainant's Employment of Capital and Investment in Plant and Equipment

170. Complainant is owned one-third by Willey, one-third by Paul Hooper, and one-third by Lorin Dore. (L. Dore, RPX 3 at 6).

171. Complainant's facility is located in a building which complainant shares with Northern States Tires, which company is owned one-half by complainant's Willey and one-half by Lorin Dore. (L. Dore, RPX 3 at 6) .

172. Complainant leases the space in the facility it shares with Northern States Tires from TGS Associates, which company is owned one-half by complainant's Willey and one-half by Lorin Dore. (L. Dore, RPX 3 at 6).

173. Complainant was incorporated in 1988 in order to become the exclusive distributor of VBG brake lathes in the United States. (Willey, CX 196 at 1-2).

174.

175.

176.

177. Complainant has a contract to sell lathes to VBG for sale outside of North America. (CX 71).

178.

179.

180. Complainant purchased the molds used by MP to produce the lathe bodies, and molds for the casting of smaller lathe parts required for its lathes,

181. Complainant has a contract to purchase the molds used to produce the plastic gears from the current producer of those components in Sweden,

182. At the beginning of 1993, complainant paid the travel expenses of MP's representatives to go to Sweden to study the manufacturing process for the VBG lathes. (Willey, CX 196 at 15).

183.

184. Complainant own several instruments known as profilometers used to evaluate the quality of the surface finish on a brake disk

Complainant

tests each lathe prior to shipment. (Willey, CX 196 at 22-23).

4. Complainant's Research and Development

185. Paul Hooper is complainant's Vice President and one-third owner. (Hooper, CX 192 at 1; L. Dore, RPX 3 at 6).

186. Complainant conducted research and development to improve the microfinish produced by its lathe when the product was first received from

Europe. (Willey, CX 196 at 9). Complainant effected several changes to the design of the lathe as a result of its research including adjusting the lathe's RPM, changes to the clutch adapter design, alterations in the run-out screws, the design of the trolley, the design of the base plate, and the selection of a particular set of tool bits. (Hooper, CX 192 at 7). Complainant has also worked on the switch to find a better one. (Hooper, CX 192 at 7).

187. Complainant

for research and product development relating to its lathes. (Dore, CX 193 at 5).

188. Complainant has spent

including the outside consultants from Dartmouth College and Archie Frangoulis, as well as the time and salaries of its own employees. (Willey, CX 196 at 22).

189. With regard to past research efforts, complainant has sought ways to make its lathe fit more vehicles, and to improve upon the micro finish of the lathe. Complainant's main concern today with regard to its research efforts is to make the lathe more "user friendly." (Willey, CX 196 at 22).

190. Complainant currently employs a research engineer who is devoting most of his time to the lathe. (Willey, CX 196 at 22).

5. MP's Production and Investment Activities

191. Beginning in March of 1994, complainant's entire disc brake lathe, except the electric motor, is made in the United States. (Willey, CX 196 at 12, Willey, RPX 2 at 63).

192. MP is located in Sunapee, New Hampshire with Wiggins its President and General Manager. (Wiggins, CX 198 at 1).

193. As of March 11, 1994, Pro-Cut had not yet taken delivery of a brake lathe totally manufactured in the United States. On that date, complainant's Bryan Laraway testified at his deposition in Washington, D.C., that he hoped and expected to see the first shipment of complete lathes from complainant's subcontractor MP, when he returned to Pro-Cut. (Laraway, CPX 7 at 31-33).

194. MP has two buildings at its Sunapee, New Hampshire facility:

195. According to Wiggins,

are devoted to work on complainant's products. (Wiggins, CX 198 at 2).

196. Complainant's brake lathe comprises of MP's current production. (Wiggins, CX 198 at 3).

197. Since August 1992, MP has produced major components for

(Wiggins, CX 198 at 2; J. Dore, CX 193 at 3).

198. MP has (Wiggins, CX 198 at 3).

199. MP produces

(Wiggins, CX 198 at 3).

200. MP attempts

201. MP supplies "most" of the spare parts to complainant that are used by complainant to support their customers in the field. (Wiggins, CX 198 at 6).

202.

(Willey Tr. at 117).

203. MP has a verbal purchase agreement with complainant by which complainant agreed to buy all of its brake lathe requirements from MP with a

204. Willey testified that he prefers to do business "on a trust basis" without a written agreement with MP; that he relies on MP's promises and MP relies on his promises; and that complainant also did business with VBG without written agreements. (Willey, CX 196 at 16-17).

205. MP sells the lathes it manufactures to

206.

207. According to complainant's Treasurer, James Dore, the value of imported components used by MP in complainant's lathe is as follows:

(Dore, CX 193 at 3).

208.

209.

210.

6. MP's Employment of Labor and Capital

211. As of the end of April 1994,

212. Wiggins testified that MP's new investment in tools only for complainant's lathes

Wiggins further testified that the total value of equipment being utilized in the production of complainant's lathes (Wiggins, CX 198 at 5).

213. Wiggins testified that the following is a "partial list" of MP machinery used "exclusively or principally" in the production of complainant's lathes:

(Wiggins, CX 198 at 6-5; CX 190).

214. Regarding use of MP's tools for purposes other than manufacturing complainant's lathes, complainant's Willey testified in his deposition as follows:

Q. Now, the contractors here in the U.S. that you identified before, Micro Precision and Spec Tool and Brooks Hansen, and those guys, do they have special tooling or equipment that they use to make the portions of the lathe for you that they make, or is that all stuff that they had previous?

A. The only one that I could speak for at all would be Micro Precision. And, no, he bought a special tool.

Q. He did buy a special tool?

A. At least one major one that I know -- major one that I know. I know he bought several of them.

Q. Are those tools useable for any other things besides making components for the Pro-Cut lathe?

A. I would think that they weren't developed just for making the lathe, so I would have to say they must be able to be used for something else.

Q. Do you know if in fact that are used for something else?

A. I don't know. I haven't seen it used for anything other than my lathe.

(Willey, RPX 2 at 144-45) (Emphasis added).

215. Willey testified that complainant

216. Brian Kelly holds a Bachelor's Degree with Honors from Stanford University, a Master's in Public Affairs Degree from the Woodrow Wilson School of Princeton University, and as of the hearing, had largely completed the requirements for the Ph.D. Degree in Economics at Harvard University, expecting to receive the degree in June, 1994. (Kelly, CX 195 at 1-2).

217. Kelly has been an independent economic consultant for 8 years. Prior to that time, he was a Manager with the Management Consulting Services of Price Waterhouse. Prior to that time he was an analyst and supervisor with the United States Department of Commerce's International Trade Administration. (Kelly, CX 195 at 1).

218. Kelly analyzed the various documents produced by complainant and MP in this investigation, inspected the physical facilities of complainant and MP, reviewed original accounting records, and interviewed complainant and MP personnel. (Kelly, CX 195 at 2).

219. The physical inventory reported in MP's 1993 corporate tax return shows parts inventory, substantially all of which could be traced to Exhibit CX 179, which is an exploded diagram of the subject machine, and which identifies the part numbers originally used by VBG and adopted by MP. (Kelly, CX 195 at 5).

220. Kelly reviewed job cards from April, 1993 through March, 1994 (Exhibits CX91-CX102), which job cards indicated the nature of each job and the machine and personnel time devoted to it. Said job cards indicate a large and increasing proportion of jobs performed for complainant. (Kelly, CX 195 at 5).

221. The accounts receivable records of Micro-Precision and files of consecutively numbered

The age of complainant's receivables is roughly the same as that for other firms with positive account balances. Kelly verified the information presented by MP by tracing samples of the invoice numbers listed to the actual invoices (see Exhibit CX31). In each case the original invoices indicate parts or subassembly numbers for the subject brake lathe. (Kelly, CX 195 at 5-6).

222. MP is a going economic concern with extensive investment in plant and equipment, and a substantial portion of this investment is devoted to production of the subject lathes or subassemblies. (Kelly, CX 195 at 6).

223. The job cards maintained by MP (CX91-CX102) indicate that a substantial majority of MP's labor time since November, 1993 has been on complainant jobs. (Kelly, CX 195 at 8).

CONCLUSIONS OF LAW

1. The Commission has in rem jurisdiction, subject matter and in personam jurisdiction.
2. There is no infringement of the asserted claim of the '146 patent.
3. There is no domestic industry involving the asserted claim of the '146 patent.
4. There is no unfair act in the importation of the subject matter in issue.
5. There is no violation of section 337.

INITIAL DETERMINATION AND ORDER

Based on the foregoing findings of fact, conclusions of law, the opinion, and the record as a whole, and having considered all of the pleadings and arguments presented orally and in briefs, as well as certain proposed findings of fact, it is the administrative law judge's determination that there is no violation of section 337 in the importation into the United States and sale for importation, or the sale within the United States after importation of certain portable on-car disc brake lathes and components thereof.

The administrative law judge hereby CERTIFIES to the Commission this final initial determination, together with the record consisting of the transcript of the hearing, and the exhibits admitted into evidence and the exhibits as to which objections have been sustained. The pleadings of the parties filed with the Secretary are not certified, since they are already in the Commission's possession in accordance with Commission Rules of Practice and Procedure.


Further it is ordered that:

1. In accordance with Commission interim rule 210.44(b), all material heretofore marked in camera because of business, financial, and marketing data found by the administrative law judge to be cognizable as confidential business information under Commission interim rule 201.6(a) is to be given in camera treatment continuing after the date this investigation is terminated.

2. Counsel for the parties shall have in the hands of the administrative law judge a copy of this final initial determination with those portions containing confidential business information designated in brackets,

no later than Friday, August 26, 1994. No such bracketed version shall be served by telecopy on the administrative law judge. If no such version is received from a party, it will mean that the party has no objection to removing the confidential status, in its entirety, from this final initial determination.

3. This initial determination shall become the determination of the Commission forty-five (45) days after the service thereof, unless the Commission, within forty-five (45) days after the date of filing of the initial determination shall have ordered review of the initial determination or certain issues therein pursuant to Commission interim rules 210.54(b) or 210.55 (19 C.F.R. § 210.54(b) or 210.55) or by order shall have changed the effective date of the initial determination.


Paul J. Luckern
Administrative Law Judge

Issued: August 12, 1994