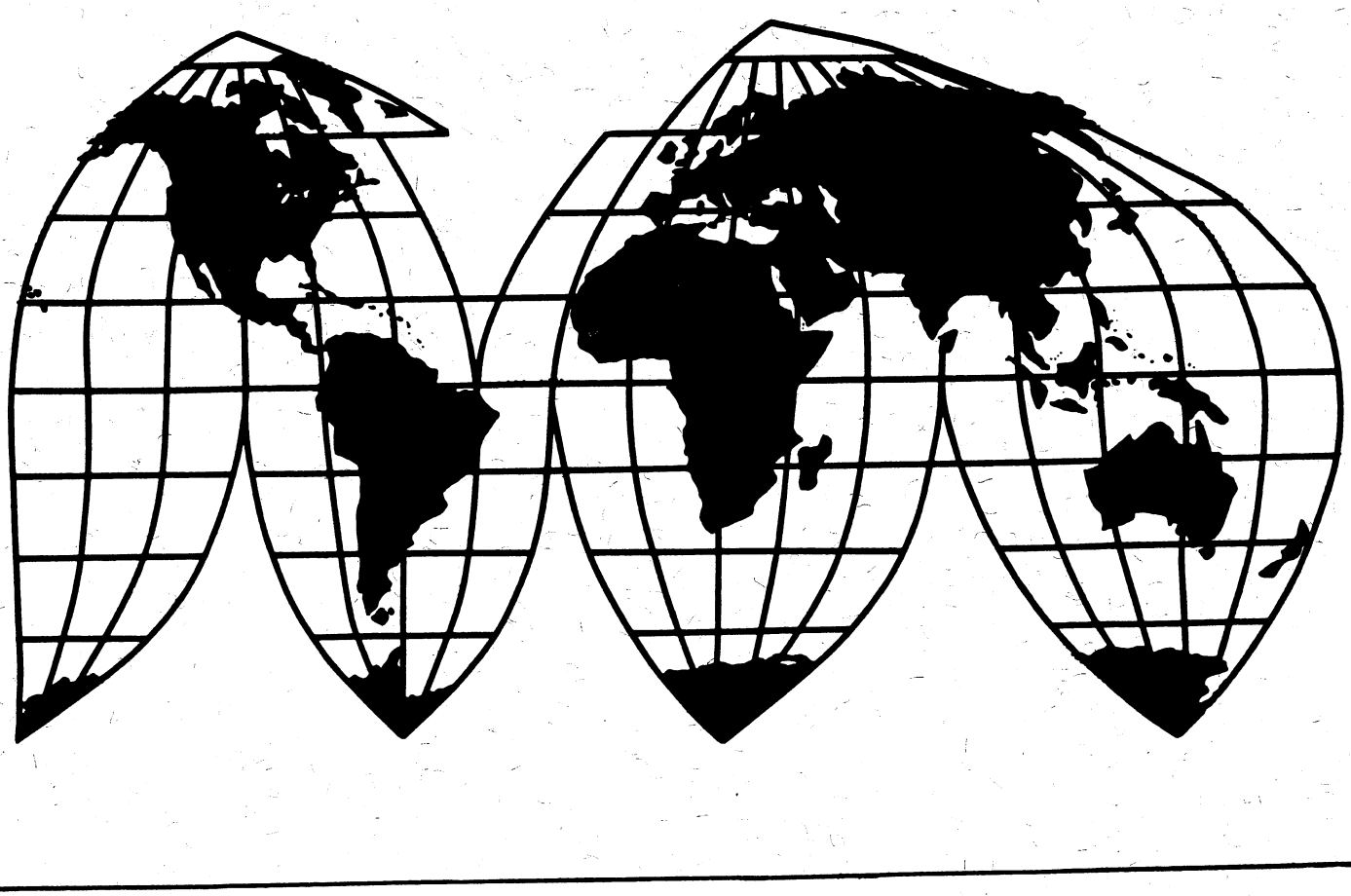
In the Matter of

Certain Circuit Board Testers

Investigation No. 337-TA-342
(Temporary Relief Decision March 17, 1993)

Publication 2622 **April 1993**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Peter S. Watson, Vice Chairman
David B. Rohr
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Robert A. Rogowsky, Director
Office of Operations

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

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In the Matter of

Certain Circuit Board Testers

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

In the Matter of CERTAIN CIRCUIT BOARD TESTERS	Inv. No. 337-TA-342

NOTICE OF COMMISSION DECISION TO DENY MOTION FOR TEMPORARY RELIEF

AGENCY: U.S. International Trade Commission

ACTION: Notice

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to deny the complainant's motion for temporary relief in the above-captioned investigation and to vacate the initial determination (ID) issued by the presiding administrative law judge (ALJ) on January 11, 1993. The Commission will issue its own opinion in support of its decision to deny temporary relief. Findings of fact made by the ALJ will be adopted to the extent they are found or referenced in the Commission's opinion.

ADDRESS: Copies of the nonconfidential 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 SW., Washington, DC 20436, telephone 202-205-2000.

FOR FURTHER INFORMATION CONTACT: Jean Jackson, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3104. Hearing-impaired individuals are advised that information on this matter can

be obtained by contacting the Commission's TDD terminal on 202-205-1810.

SUPPLEMENTARY INFORMATION: On September 25, 1992, Integri-Test, Corp. (Integri-Test) filed a complaint and a motion for temporary relief with the Commission alleging violations of section 337 in the importation and sale of certain circuit board testers allegedly covered by certain claims of Integri-Test's U.S. Letters Patent 4,565,966 (the '966 patent). The notice of investigation instituting an investigation based on Integri-Test's complaint was published in the Federal Register on November 2, 1992. 57 Fed. Reg. 49490. Bath Scientific Ltd. of the United Kingdom and BSL North America of Massachusetts were named as respondents. Pursuant to Commission interim rule 210.24(e)(8)(19 C.F.R. § 210.24(e)(8)), the Commission also provisionally accepted Integri-Test's motion for temporary relief.

The presiding ALJ held an evidentiary hearing on temporary relief from December 7-11, 1992. On January 4, 1993, all parties filed written submissions on the issues of remedy, the public interest, and respondents' bond, as provided for in Commission interim rule 210.24(e)(18)(ii) (19 C.F.R. § 210.24(e)(18)(ii)). On January 11, 1993, the ALJ issued an ID denying complainant's motion for temporary relief. On January 19, 1993, the parties filed written comments concerning the ID. Parties filed reply comments on January 25, 1993. No government agency comments were received.

On February 1, 1993, the Commission determined to designate the temporary relief phase of the investigation "more complicated" to ensure sufficient time to supplement the findings of fact made in the ID and to issue an opinion in support of its determination. 58 Fed. Reg. 7746 (February 5, 1993).

This action is taken under authority of section 337 of the Tariff Act of

1930 (19 U.S.C. § 1337) and section 210.24(e) of the Commission's interim rules (19 C.F.R. § 210.24(e)).

By order of the Commission.

Paul R. Bardos
Acting Secretary

Issued: March 17, 1993

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

In the Matter of CERTAIN CIRCUIT BOARD TESTERS	Investigation No. 337-TA-342 (Temporary Relief Proceedings)

ORDER

It is hereby **ORDERED that** --

1. Complainant's motion for temporary relief is denied.

2. The initial determination (ID) of the presiding administrative law judge (ALJ) on temporary relief is vacated. Findings of fact made in the ID are adopted to the extent that they are found or referenced in the opinion in support of the Commission's determination which will be issued at a later date.

3. Respondents' application for review of ALJ Order No. 8, as that application relates to termination of the temporary relief phase of this investigation, is accepted and denied as moot.

4. The Secretary shall serve copies of this **Order** and the Commission Opinion to be issued in support thereof on each party of record to this investigation and on the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the Secretary of the Treasury, and publish notice thereof in the Federal Register.

By **order** of the Commission.

Paul R. Bardos
Acting Secretary

Issued: March 17, 1993

CERTIFICATE OF SERVICE

I, Paul R. Bardos, hereby certify that the attached NOTICE OF COMMISSION DECISION TO DENY MOTION FOR TEMPORARY RELIEF was served upon Kent Stevens, Esq. and the following parties via first class mail, and air mail where necessary on March 17, 1993.

Paul R. Bardos, Acting Secretary
U. S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

On behalf of Complainant: **INTEGRI-TEST CORPORATION**:

Brian Brunsvold, Esq.
David W. Hill, Esq.
Stephen J. Rosenman, Esq.
Wayne W. Herrington, Esq.
Doris J. Johnson, Esq.
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER
1300 I Street, N.W.
Washington, D.C. 20005

For Respondents: **BATH SCIENTIFIC, LTD. and BSL NORTH AMERICA**:

William C. Rowland, Esq.
Anthony W. Shaw, Esq.
Robert S. Swecker, Esq.
Regis E. Slutter, Esq.
BURNS, DOANE, SWECKER & MATHIS
George Mason Building
Washington & Prince Streets
P.O. Box 1404
Alexandria, VA 22313-1404

Talbert F. Lindstrom, Esq.
Assistant Director for International
Antitrust
Federal Trade Commission
Room 361
Pennsylvania Ave. at Sixth Street, N.W.
Washington, D.C. 20580

Mr. Charles S. Stark
Antitrust Division
U.S. Department of Justice
Room 7115, Main Justice
Pennsylvania Ave. & Tenth Street, N.W.
Washington, D.C. 20530

Michael T. Schmitz
Chief Counsel
U.S. Customs Service
1301 Constitution Ave., N.W.
Washington, D.C. 20229

Sandra H. Shapiro, Esq.
Associate General Counsel
Department of Health & Human
Services
Room 5362, Cohen Building
330 Independence Ave., S.W.
Washington, D.C. 20201

PUBLIC VERSION

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

In the Matter of CERTAIN CIRCUIT BOARD TESTERS	Investigation No. 337-TA-342

OPINION OF THE COMMISSION

INTRODUCTION

On January 11, 1993, the presiding administrative law judge (ALJ) issued an initial determination (ID) denying the motion for temporary relief filed by complainant Integri-Test Corp. (Integri-Test) in Inv. No. 337-TA-342, Certain Circuit Board Testers. The Commission determined that the ALJ's ID did not contain sufficient factual findings to support its denial of temporary relief, or adequate legal analysis to support its conclusions of law. Accordingly, the Commission determined to review the ID and to issue its own opinion in the matter. Upon review, the Commission has determined to deny the motion for temporary relief and to vacate the ID. Findings of fact made by the ALJ in her ID are adopted to the extent that they are referenced in this opinion.

PROCEDURAL HISTORY

On September 25, 1992, Integri-Test filed a complaint and a motion for temporary relief with the Commission alleging violations of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, in the importation and sale of certain circuit board testers, equipment used to check the integrity of electrical

networks on circuit boards. Integri-Test alleged that respondents infringed three claims of its U.S. Letters Patent 4,565,966 (the '966 patent).

The Commission published the notice of investigation on November 2, 1992 naming Bath Scientific Ltd. of the United Kingdom and BSL North America of Massachusetts (collectively, BSL) as respondents. 57 Fed. Reg. 49490. Pursuant to Commission interim rule 210.24(e)(8),[1] the Commission also provisionally accepted Integri-Test's motion for temporary relief.[2]

The ALJ held an evidentiary hearing from December 7 through December 11, 1992. Sixty days after institution, on January 4, 1993, all parties filed written submissions on the issues of remedy, the public interest, and respondents' bond.[3] On January 11, 1993, the ALJ issued her ID denying Integri-Test's motion for temporary relief. All parties filed written comments on the ID on January 19, 1993,[4] and reply comments on January 25, 1993.[5] No government agency comments were received. On February 1, 1993, the Commission determined to review the ID and to designate the temporary relief phase of the investigation "more complicated." 58 Fed. Reg. 7746 (Feb. 5, 1993).

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[1] 19 C.F.R. § 210.24(e)(8).

[2] The Commission has jurisdiction over this proceeding by virtue of the importation of circuit board testers by respondents. (Integri-Test Exs. 69, 74, 94).

[3] 19 C.F.R. § 210.24(e)(18)(ii).

[4] 19 C.F.R. § 210.24(e)(17)(iii).

[5] Under 19 C.F.R. § 210.24(e)(17)(v), the reply comments were due 10 days after issuance of the ID, or in this case January 21, 1993. The deadline was extended, however, in order to give the parties sufficient time to file their responses.

SUMMARY OF FINDINGS

Based on the record developed in this temporary relief proceeding, and for the reasons discussed below, the Commission determines that:

(1) complainant is likely to prevail in defending claims 1, 9 and 28 against charges that they are anticipated by the prior art;

(2) complainant is likely to prevail in defending claims 1, 9 and 28 against charges that they are invalid as obvious;

(3) complainant is likely to prevail in defending claims 1 and 9 against charges that they are invalid for indefiniteness;

(4) complainant is unlikely to prove that respondents have infringed the claims at issue, either literally or under the doctrine of equivalents;

(5) complainant is likely to show that there is a domestic industry;

(6) complainant is threatened with substantial, but not irreparable harm, if it does not prevail on the motion for temporary relief;

(7) a consideration of the balance of harm between the parties leads to the conclusion that complainant and respondents will suffer equal harm if they do not prevail on the motion for temporary relief; and

(8) The public interest would not be significantly harmed by issuance of temporary relief.

Based on a balancing of the temporary relief factors, therefore, we determine that temporary relief should be denied. We also determine to accept and deny as moot respondents' application for review of ALJ Order No. 8, as that application relates to termination of the temporary relief phase of this investigation based on complainant's alleged violation of Commission interim rule 210.5(b). 19 C.F.R. § 210.5(b).

DISCUSSION

Under 19 U.S.C. § 1337(e)(3), our ALJs use the same analysis in determining whether to grant temporary relief that courts within the Federal Circuit use in deciding whether to grant preliminary injunctions.[6] The analysis requires a balancing of four factors:

1. Complainant's probability of success on the merits;

2. Threat of irreparable harm to the domestic industry in the absence of the requested relief;

3. The balance of harm between the parties; and

4. The effect, if any, that issuance of the requested temporary relief would have on the public interest.

Under Commission interim rule 210.24(e)(17)(ii), the Commission can modify or vacate a temporary relief ID "on the basis of errors of law or policy matters. . . . No review will be ordered solely on the basis of alleged errors of fact."

I. The '966 Patent and Its Invention

Testing the integrity of networks on circuit boards is an important part of the circuit board manufacturing process. An early method of testing circuit boards employed a "bed-of-nails." The "bed-of nails" tested the resistance of networks by simultaneously positioning separate contact probes

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[6] Certain Pressure Transmitters, Inv. No. 337-TA-304, (Temporary Relief Decision of March 19, 1990) USITC Pub. 2392, aff'd sub nom. Rosemount, Inc. v. USITC, 910 F.2d 819 (Fed. Cir. 1990).

on all terminal points of a circuit board.[7] Though effective, these testers had high design and maintenance costs. Dual probe resistance testers, also in the prior art, maneuvered probes to contact two test points (e.g., the end points of a network) at a time. This system eliminated the cost and mechanical complexity of the bed-of-nails testers. However, testing for short circuits with dual probe testers required an electrical resistance test of every network against every other network. If a circuit board had many networks, the dual probe process was extremely time-consuming.

The Webb prior art patent (BSL Ex. 3) taught the use of capacitance testing to check the integrity of circuit boards. A single capacitance test can detect whether a network is shorted to any other network, and thus does not require a large number of probe movements. Capacitance testing, however, does not detect all of the faults that can be detected with resistance testing.

The '966 patent, entitled "Method and Apparatus for Testing of Electrical Interconnection Networks," issued on January 21, 1986 to the inventors, Robert P. Burr, et al., and is assigned to complainant Integri-Test. This patent claims an apparatus (claims 9-15) and methods (claims 1-8 and 16-33) for testing the integrity of circuit boards using a small number of

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[7] Resistance is a measure of opposition offered by a circuit (also referred to as a "network") to electric current flow. When there are breaks in a network, the network is "open" and the resistance measurement is abnormally high. Capacitance is a measure of a network's capacity to store a static electric charge. When two networks are mistakenly connected or "shorted," the resultant capacitance measurement is abnormally high. Impedance, a term frequently used interchangeably with the term "capacitance" by the parties to this investigation, is an electrical measurement that is inversely proportional with a constant to capacitance, i.e., if one quantity is known, the other can be easily calculated. (Tr. 347).

probes to make resistive and impedance (or capacitance) measurements. The '966 patent states that its combination of resistance and capacitance tests substantially reduces the number of tests required.

Only claims 1 and 28, directed to a method for testing circuit boards, and claim 9, directed to an apparatus for testing circuit boards are at issue in these proceedings.[8] Claim 1 describes a method of testing circuit boards that includes a combination of impedance and resistance tests. Claim 28 claims a method of testing circuit boards based on capacitance tests alone. Claim 9 describes an apparatus for making both impedance and resistance tests on circuit boards.

II. The Four Factors Pertaining to the Granting of Temporary Relief

A. Probability of Success on the Merits

The presumption of validity of a patent is a procedural device that places the burden of going forward and the ultimate burden of persuasion on the one attacking the validity of a patent. However, given the extraordinary nature of temporary relief, the patentee carries the burden of proving that its patent is likely valid, as well as likely infringed.[9] Under section 337, the complainant has the additional burden of proving that it is likely to establish the existence of a domestic industry. [10] We examine the issues of validity, infringement and domestic industry in turn.

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[8] Claims 1, 9, and 28 are set forth in the Appendix to this opinion.

[9] See, Nutrition 21 v. United States, 930 F.2d 867, 869 (Fed. Cir. 1991).

[10] 19 U.S.C. § 1337(a)(2).

1. Validity

Respondents contended that asserted claims 1, 9, and 28 were invalid as both anticipated and obvious. Respondents also contended that certain language in claims 1 and 9 rendered those claims invalid for indefiniteness.

i. Anticipation

Claim 1. Under 35 U.S.C. § 102, a claim is invalid as anticipated (i.e., lacking novelty) if a single prior art reference discloses each and every element of the claim, arranged as in the claim.[11] Respondents argued that claim 1 is directed toward a method consisting of an "assembly line" of prior art capacitance tests and resistance tests. They argued that, since both capacitance and resistance tests were disclosed in a prior art patent (the Webb patent)(BSL Ex. 3), claim 1 is invalid as anticipated. The Webb patent claims a method of testing circuit boards by measuring capacitance. The background section of the Webb patent also mentions testing circuit boards by measuring resistance, but the Webb patent does not disclose making capacitance and resistance measurements in a single method. The ALJ agreed with respondents that claim 1 was directed to an "assembly line" of capacitance and resistance tests, and therefore found that claim 1 was likely to be proven to be anticipated by the prior art.

The plain language of claim 1, however, negates the ALJ's interpretation of the claim as reading on an "assembly line" of prior art testers. Claim 1 recites that faults are indicated based on the measurement of impedance and resistance. The last step of claim 1 reads --

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[11] Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 1236 (Fed. Cir. 1984); Lindemann Maschinenfabrik GmBH v. American Hoist and Derrick Co., 730 F.2d 1452, 1458 (Fed. Cir. 1984).

indicating faults when either

> (a) said impedance measurement value is above said respective established value by more than a predetermined amount;
> (b) said impedance measurement value is below said respective established value by more than a predetermined amount; and/or
> (c) said resistance measurement value departs from said respective predetermined value.

Thus, the claim requires an interaction between the measurement of impedance and resistance. In contrast, if tests were performed serially, there would be no physical or analytical interaction between the tests. One test would be completed, followed by fault detection by that test. The second test would then be performed, followed by its own separate fault analysis.

Moreover, the invention claimed in claim 1 is consistently described in the patent specification as the combination of impedance (or capacitance) and resistance testing to test completely for faults in interconnection networks. The specification sets forth the advantages flowing from the combination of tests as recited in claim 1. (Integri-Test Ex. 1, col. 2, line 66 to col. 3, line 9.) The prosecution history of the '966 patent also supports an interpretation of the claims as a combination, and not a mere assembly, of tests. Arguments in the prosecution history refer to the claimed invention as a combination of tests which result in fewer tests being required. (BSL Ex. 2, Response to Office Action of January 8, 1985, June 19, 1985, at 5-8).

Although the Webb patent discloses both resistance and capacitance testing, it does not disclose those tests in a single testing method as set forth in claim 1 of the '966 patent. Thus, because no single prior art reference now before the Commission teaches the combination of claim 1, we

find that claim 1 is not likely to be shown to be invalid as anticipated. Accordingly, we reverse the ALJ's determination on this issue.

Claim 9. The ALJ found that no single piece of prior art of record taught an apparatus that combined capacitance and resistance testing as required by claim 9. ID at 10. We agree with the ALJ's finding and adopt her determination that claim 9 is not likely to be proven invalid as anticipated.

Claim 28. In assessing the validity of claim 28, the ALJ stated that only one element of claim 28 -- viz., "indicating as shorted together any networks showing similar high values" -- is not disclosed in the prior art Webb patent. ID at 11. The ALJ found that this clause suggests only a new use for the exact process already patented by Webb, and found claim 28 invalid for anticipation. We disagree with the ALJ's analysis. The clause "indicating as shorted together any networks showing similar high values" is not directed merely to the new use of an old process, but rather to a distinct and limiting step that is not found in the Webb patent.

Respondents admitted that the last step of claim 28 is not found in the Webb patent, but argued that claim 28 merely defines the method that is practiced by the apparatus of the Webb patent and that under principles of inherency, the claim is anticipated by the Webb patent even though the Webb patent does not specifically teach every element of the claim. Respondents cited Verdegall Brothers, Inc. v. Union Oil Company of California, 814 F.2d 628 (Fed. Cir. 1987), and In re King, 801 F.2d 1324 (Fed. Cir. 1986), for the proposition that, for anticipation, it suffices that the prior art inherently possesses the "inventive concept or desirable property discovered by the patentee." However, both King and Verdegall concerned method claims that

merely described prior art processes in more detail. In contrast, claim 28 requires the additional step of comparing the data obtained through measuring networks for similar high values and indicating those networks as shorted together -- a step not disclosed in the Webb patent. While it may be an inherent result that two networks shorted together would have similar high values, we find that the step of indicating the networks as shorted together, as claim 28 recites, has not been shown to be inherent in the prior art teachings. Accordingly, we determine that claim 28 is not inherent in the prior art teachings of the Webb patent.

Respondents also contended that claim 28 is invalid under 35 U.S.C. § 102(a).[12] According to respondents, every step of claim 28, including the last clause, was set forth in an article written by Mr. Webb (BSL Ex. 104), was practiced by test equipment built by Honeywell, Inc., and was disclosed to the general public without restriction prior to the date of invention of the '966 patent (Tr. 760-763). However, the ALJ considered the evidence concerning Mr. Webb's article and the Honeywell equipment and made the factual finding, which the Commission adopts, that respondents have not yet offered clear and convincing evidence that "this particular point" (i.e., the

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[12] Under 35 U.S.C. § 102(a) a patent is invalid if:

> the invention was known or used by others in this country or patented or described in a printed publication in this or a foreign country before the invention thereof by the applicant for patent.

Case law requires the use be public or at least not secret. W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983).

indicating step) was made public before 1983.[13] ID at 12. Consequently, we determine that complainant is likely to prevail in its defense of the charge that claim 28 was anticipated by the Webb article and/or the Honeywell equipment. We therefore reverse the ALJ's determination that claim 28 is likely to be shown to be anticipated.

ii. Obviousness

Under Graham v. John Deere, 383 U.S. 1, 17-18 (1966), a determination of whether a claim is invalid as obvious in view of the prior art involves a four-part factual inquiry into: (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations, also referred to as "objective evidence of nonobviousness," e.g., long felt need, commercial success, failure of others, copying, unexpected results. Under Federal Circuit precedent, a finding that claims are obvious over the prior art requires a showing that there is some teaching, suggestion, or incentive in the prior art to make the combinations that are recited in the claims.[14]

The relevant prior art teaches methods of testing circuit boards by means of resistance tests and capacitance tests. (Staff Ex. 9, BSL Ex. 107, Tr. 1410, 1470). The prior art methods of testing for resistance include numerous "bed-of-nails" circuit board testing devices. Such devices simultaneously position separate delicate contact probes on all terminal points of a circuit board and use a rapid electronic switching mechanism to

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[13] The earliest date of invention for the patent asserted in these proceedings is March 7, 1983, the filing date of the patent application.

[14] See, e.g., Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 887 (Fed. Cir. 1988).

perform resistance measurements between (a) the contact points corresponding to the end points of each network and (b) the contact points on different networks. The bed-of-nails devices test circuit boards quickly and completely, but there are high design and maintenance costs associated with them. (Staff Ex. 11 at 2; Staff Ex. 9 at 1-2; BSL Ex. 3, col. 1, lines 54-57.)

The prior art also includes dual probe resistance testers in which probes maneuver to contact two test points (e.g., the end points of a network) at a time. (BSL Ex. 108; BSL Ex. 3, col. 1, lines 28-39). The probes are maneuvered to contact test points and resistance is measured between the probes. The dual probe resistance testing system eliminated the cost and mechanical complexity of the bed-of-nails testers. However, testing for short circuits with a dual probe resistance tester required an electrical resistance test of every network against every other network, an extremely time-consuming process involving a large number of probe movements. (BSL Ex. 3, col. 1, lines 57-59.

The Webb patent teaches the use of capacitance testing with probes to test the integrity of networks (BSL Ex. 3). The Webb patent teaches that capacitance testing overcomes certain disadvantages of the dual probe resistance testing system inasmuch as a single capacitance test of a network will detect whether the network is shorted to any other network. Webb also teaches that capacitance tests can detect discontinuities (or open circuits) within the network. (BSL Ex. 3, col. 1, line 63 to col. 2, line 1). Capacitance testing, however, does not detect all of the faults that can be detected with prior art resistance tests or provide functionally useful

resistance measurements. (Tr. 1043, Tr. 1366; BSL Ex. 103; Staff Ex. 12; Staff Ex. 13.)

Other prior art teaches the use of two or more types of electrical tests to evaluate circuit boards, (BSL Ex. 107A, 108), and the consecutive use of a capacitance test and a resistance test to test for faults in telephone cable equipment. (BSL Ex. 109).

The difference between the invention claimed in claim 1 and the prior art is the requirement in claim 1 that at least one impedance test and at least one resistance test be performed on a circuit board in a specified manner. The difference between the invention claimed in claim 9 and the prior art is the requirement that resistance and impedance tests be combined in one apparatus to test a circuit board. The difference between the invention claimed in claim 28 and the prior art is the step of indicating as shorted together any networks showing similar high capacitance values.

We adopt the ALJ's findings that one of ordinary skill in the art in 1983 would have had at least a bachelor's degree in electrical engineering and several years of experience in testing circuits and that one of ordinary skill in the art would have understood that more than one kind of test should be done on a circuit board to identify all the possible faults. ID at 7. We also adopt the ALJ's finding that there is little objective evidence of nonobviousness (e.g., commercial success, etc.) with respect to claim 1. ID at 8. We find the ALJ's findings on ordinary skill in the art and objective evidence of nonobviousness equally applicable to claims 9 and 28.

The ALJ discussed the teachings of the Webb patent and concluded that, although the Webb patent teaches the use of both resistance testing and

capacitance testing to test the integrity of a circuit, it does not teach using these tests in combination as they are claimed in claim 1. ID at 8-9. Moreover, the ALJ found that no prior art has been identified that suggests the desirability of combining resistance testing and capacitance testing of a circuit board in one method of testing. Id. The ALJ also found that the prior art did not teach or suggest the combination of capacitance and resistance testing in a single apparatus as set forth in claim 9. ID at 10. We do not disturb the ALJ's findings now, but urge the parties to explore them fully in any hearing on the merits. Accordingly, we determine that claims 1 and 9 are not likely to be shown to be invalid as obvious.

The Commission investigative attorney (IA) argued that a suggestion to combine the prior art lies in the fact that resistance and capacitance testing are complementary, i.e, that the advantages of one test match the disadvantages of the other test. While this fact may suggest doing both tests to completely test a circuit, it has not been established that it also suggests a method or apparatus that combines the two testing methods in the particular manner of claim 1 or in the single apparatus described in claim 9.

As for claim 28, Mr. Webb, respondents' expert witness and the inventor of the Webb patent, testified that the claim's distinctive last step would have been implicit from reading his patent. Respondents argued that Mr. Webb's unchallenged and uncontradicted testimony on the obviousness of claim 28 is the only evidence presented at the evidentiary hearing. However, Mr. Webb is an expert in the field of electrical engineering and electronic test equipment (Tr. 753) and the inventor of a movable probe circuit board tester. (BSL. Ex. 3). Mr. Webb's testimony did not go to what one of ordinary skill

in the art would have known at the '966 patent's date of invention. Moreover, his testimony did not go to the key point of whether the prior art references supplied the suggestion or incentive to make the modification of claim 28. While respondents and the IA argue that the suggestion to combine the prior art in the manner of claim 28 is found in the Webb article and the Honeywell equipment, we have adopted the ALJ's finding that respondents have not yet established that those sources of information were public at the time that the '966 patent application was filed. Accordingly, we find that claim 28 is not likely to be shown to be invalid as obvious in view of the prior art.

iii. Indefiniteness

Finally, respondents contended that the clause "at least a measurement of the end-to-end resistance" found in claims 1 and 9 rendered those claims invalid for indefiniteness under 35 U.S.C. § 112, ¶ 2. According to respondents, the fact that networks can exist with several segments each having end points, makes the singular claim limitation "at least a measurement of the end-to-end resistance" of a network indefinite. Based upon her reading of the specification, the ALJ interpreted "a resistance measurement," as used in the patent in controversy, to refer to any number of resistance measurements that are necessary to include a measurement of the resistance in each segment of the network to be tested. ID at 9. In the same context, the ALJ found that "the end-to-end resistance of each network" means that each segment of the network will be tested for resistance. When the resistance of each segment is known, the resistance of the network will have been tested from end-to-end. ID at 10. The ALJ's interpretation is supported by the patent specification (Integri-test Ex. 1, col.3, lines 16-24, and col. 4,

lines 15-17 and 37-38) and testimony to the effect that one skilled in the art would understand the claim language to cover the end-to-end testing of a network having multiple ends. (Tr. 998-999; Tr. 1025-1026). In view of the patent specification and the hearing testimony, we determine that claims 1 and 9 are not likely to be shown to be invalid for indefiniteness.

2. Claim Interpretation and Infringement

i. Legal Standard

A patent claim may be infringed either literally or under the doctrine of equivalents. Literal infringement exists if every claim limitation is present in the accused device or process.[15] If every limitation is not present, infringement may still be found under the doctrine of equivalents if the device or process performs the substantially the same function in substantially the same way to produce substantially the same result as the patented invention.[16] Infringement requires that every limitation of a claim be met literally or by a substantial equivalent.[17] An equivalent under the doctrine of equivalents results from an insubstantial change which, from the perspective of one of ordinary skill in the art, adds nothing of significance

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[15] Mannesmann Demag Corp. v. Engineered Metal Products Co., 793 F.2d 1279, 1282 (Fed. Cir. 1983).

[16] Graver Tank & Mfg. Co., Inc. v. Linde Air Products Co., 339 U.S. 605, 608 (1950); see also Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 934 (Fed. Cir. 1987)(en banc).

[17] London v. Carson, Pirie, Scott & Co., 946 F.2d 1534, 1538 (Fed. Cir. 1991).

to the claimed invention.[18] The doctrine of equivalents, however, does not allow one to ignore claim limitations.[19]

Under Texas Instruments v. USITC, 805 F.2d 1558, 1562 (Fed. Cir. 1986), patent infringement analysis entails two inquiries: (1) the determination of the scope of the claims, as a matter of law, and (2) the factual finding of whether the claims, properly construed, encompass the accused device. The majority of the ALJ's findings of fact concerning infringement are based on the testimony of experts which the ALJ observed. Moreover, the ALJ's factual findings in a temporary relief proceeding are not reviewed by the Commission. The Commission therefore adopts the findings of fact made by the ALJ concerning the presence or absence of structures in the respondents' devices and the presence or absence of steps in the method practiced by respondents.

ii. Claim Construction

The parties differed on whether the respondents practiced the following claim limitations (the key language is underscored):

Claim 1

establishing an electrically conductive reference means . . .

making measurements from terminal points of the interconnection board being tested including
at least one impedance measurement from a terminal point of each network to said reference means, and
at least a measurement of the end-to-end resistance of each network; . . .

indicating faults when either

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[18] Valmont Indus., Inc. v. Reinke Mfg. Co., Inc., 983 F.2d 1039, 1043 (Fed. Cir. 1993).

[19] Pennwalt at 935.

(a) said impedance measurement value is above said respective established value by more than a predetermined amount;
(b) said impedance measurement value is below said respective established value by more than a predetermined amount; and/or
(c) said resistance measurement value departs from said respective predetermined value.

Claim 9

conductive reference means spaced from said conductor network of the interconnection board by a dielectric;

impedance measuring means connected to at least one of said probes to measure impedance between the probe connected thereto and said reference means;

resistance measuring means connected to said probes to measure electrical resistance between said probes; and

control means for moving said probes and for activating said measuring means to obtain:
(a) at least one impedance measurement from a terminal point of each network to said reference means; and
(b) at least a measurement of the end-to-end resistance of each network.

Claim 28

establishing a conductive reference plane; . . .

measuring the capacitance between at least one terminal point of each network and said reference plane;

indicating as a short circuit fault for any measured capacitance which is higher than the respective known correct value by more than a predetermined amount; and

indicating as shorted together any networks showing similar high values.

Claims 1 and 9 contain limitations in the form of means-plus-function. The Patent Act provides explicit guidance for interpretation of claim elements expressed in means-plus-function terms:

> 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.

35 U.S.C. § 112 ¶ 6.

While means-plus-function claims permit a patent applicant to express an element in a combination claim as a means for performing a function, the applicant must describe in the patent specification some structure which performs the specified function, and the functional claim language must be construed by the tribunal to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.[20] Section 112, ¶ 6 operates like the reverse doctrine of equivalents in that it restricts the literal claim language.[21] For a means-plus-function limitation to read on an accused device, the accused device must employ means identical to or the equivalent of the structures, material, or acts described in the patent specification.[22] The accused device must also perform the identical function as specified in the claims.[23]

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[20] Valmont Indus., Inc. v. Reinke Mfg. Co., Inc., 983 F.2d 1039, 1042 (Fed. Cir. 1993).

[21] Johnston v. IVAC Corp., 885 F.2d 1574, 1580 (Fed. Cir. 1989).

[22] Valmont at 1042.

[23] Id.

We determine that claim 1 requires the steps of: establishing a separate conductive reference means for making impedance measurements of networks on a circuit board; making impedance and resistance measurements on a circuit board; comparing the measured impedance and resistance values with the values of an interconnection board with no electrical faults; and indicating faults when the measured results differ from the results on the fault free board.

We determine that Claim 9 requires an apparatus having two or more moveable probes for making both impedance measurements and resistance measurements on circuit boards. Claim 9 also requires a reference means for making the impedance measurements, means for measuring impedance, and means for measuring resistance.

We determine that claim 28 requires the steps of: establishing a reference means for measuring capacitance; making capacitance measurements on a circuit board; comparing the capacitance measurement to values established by measuring another board with no electrical faults; indicating as a short circuit fault any capacitance value which is higher than the respective known correct value; and indicating as shorted together any networks showing similar high values.

iii. Literal Infringement

As noted, literal infringement requires the presence of each element of a claim in the accused device or process. Complainant has failed to show the presence of four elements recited in the claims at issue in the apparatus and methods of the respondents. First, complainant has failed to show the presence of a reference means or reference plane. The elements "reference

means" in claim 1 and 9 and "reference plane" in claim 28 refer to the provision of a conductive reference means relative to the network under test, separated therefrom by a dielectric (a nonconductive material), and having a structure equivalent to that described in the specification, as required by 35 U.S.C. § 112, ¶ 6. The '966 patent drawings, figures 1 and 4, depict the reference means as a flat plate spaced from the network of the product under test by a dielectric.

Complainant contended that the reference means claim limitation was met in respondents' testers by a grounded vacuum chuck. A vacuum chuck is an additional piece of equipment that can be supplied with respondents' testers. (Tr. 856.) Vacuum chucks are used to hold some types of products, such as ceramic substrates, in place for testing. Id. Vacuum chucks can be made of metal, which is conductive, or of other materials such as plastic, which are nonconductive. (Tr. 1145).

Complainant sought to establish that the vacuum chuck met the reference means limitation through the testimony of its expert, Mr. Geiger. Mr. Geiger based his testimony on a videotape of respondent's tester in operation, BSL manuals, a schematic, and deposition testimony. (Tr. 369). Mr. Geiger had not actually examined respondents' testers or seen anyone operate them. Although Mr. Geiger suggested that the "vacuum chuck" might be the reference plane in respondents' system, his direct testimony on this point is not clear. On cross-examination, Mr. Geiger stated that he "suspected" that the vacuum chuck was a reference plane, but that the term "believe," might be a bit too strong to characterize the level of his conviction that the vacuum chuck was a reference means. (Tr. 470-471).

The preambles of claims 1, 9, and 28 require testing of interconnection boards, while the vacuum chuck is designed to hold ceramic substrates. ID at 15, citing Tr. 470. The ALJ found that the vacuum chuck cannot be used to hold interconnection boards without an additional plate because interconnection boards have holes that prevent the vacuum from working. ID at 14-15. The ALJ also found that when four probes are used in the BSL system to test both the top and bottom of a circuit board, the board is supported at its edges by a jig (Tr. 856), and that no witness could identify a reference plane in such configuration (Tr. 471, 857, 1019). The ALJ further found that respondents' testers functioned without using any reference means or plane to measure capacitance as required in claims 1, 9, and 28, and that the evidence of record did not support a finding that respondents' customers actually used a vacuum chuck as a reference means in respondents' system. ID at 14. The ALJ carefully considered Mr. Geiger's testimony, but concluded that complainant had not demonstrated the presence of a reference means in respondents' testers. We adopt that conclusion.

Second, claims 1 and 9 require the taking of impedance measurements and resistance measurements, and claim 28 requires the taking of capacitance measurements alone. Complainant alleged that the "charge rise time" (CRT) measurement made by respondents' testers is the same as or an equivalent measurement to the impedance or capacitance measurement called for in the patent claims. The ALJ disagreed, finding that, while capacitance is a factor in determining CRT, the resistance on the network and other factors also influence CRT measurement. ID at 13. The ALJ referenced testimony to the effect that impedance is an AC (alternating current) measurement, while CRT is

not (Tr. 454-455). Moreover, CRT is a measurement of the time in seconds that it takes for the voltage to rise, while impedance is a measurement that has a value in ohms and is defined at a particular frequency. Tr. 852-853. The ALJ also found that the BSL system gives no exact capacitance reading, as required by the claims at issue.[24] ID at 13. [

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Tr. 948-50. After considering the evidence, the ALJ found that complainant had not shown that respondents' tester made capacitance measurements. We adopt that finding.

Third, claim 9 requires impedance measuring means and resistance measuring means. The only reference in the specification to specific structures is the language "suitable resistance and capacitance measurement devices may be designed by persons skilled in the art and are available commercially, e.g., Hewlett-Packard company (Model 4262 LCR Meter)." (Integri-Test Ex. 1, col. 5, lines 65-68.) The patent specification also describes the invention as making "radio frequency" impedance measurements. See Integri-Test Ex.1, col. 2, line 66 to col. 3, line 2. Complainant alleged that the instrument that measures CRT in the BSL system is the same as or equivalent to the impedance measuring means claimed in claim 9. The ALJ made no specific findings on whether complainant had demonstrated the presence of the impedance measuring means and resistance measuring means in respondents' system. However, the ALJ did find that respondents' system did not perform the

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[24] We interpret the ALJ's use of the term "no exact" to mean that the BSL system returns no quantitative measurement of capacitance or impedance.

function of measuring capacitance.[25] Since the accused device must also perform the identical function as specified in the claims for literal infringement,[26] we find that the CRT measuring instrument is not an equivalent of the claim element "impedance measuring means" under section 112, ¶ 6. Additionally, [

CBI

(Tr. 454).

Fourth, complainant has not shown that respondents' testers perform the last step of claim 28, viz., "indicating as shorted together any networks showing similar high values." Respondents' expert witness vigorously denied that respondents' testers practiced this step, Tr. 895-897, and his testimony was not rebutted. Moreover, we find complainant's best documentary evidence that this step is practiced by respondents' testers to be unpersuasive.[27] [28]

Since complainant has not demonstrated the presence of the reference means or plane, impedance measuring means, capacitance measurement, or

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[25] The ALJ's findings on whether the resistance measurement limitation is met in respondent's equipment are unclear. See ID at 13-14.

[26] Valmont at 1042.

[27] Complainant's Exhibit CX-14, at 501079, which is a page from respondents' user manual.

[28] We note that complainant has apparently conceded, at least for purposes of the temporary relief proceedings, that claim 28 is not infringed by respondents. Complainant did not dispute the ALJ's finding that claim 28 is unlikely to be shown to be infringed, even though it disputed her findings on the reference means and capacitance measurement limitations that are found in claim 28 as well as claims 1 and 9. Further, in reply to respondents' comments on the ID, complainant stated "[f]or the reasons discussed above, claims 1 and 9 are valid and infringed," without mentioning claim 28. Complainant's Response to the Comments of Respondents and the Staff, p. 20, January 25, 1993.

indicating step, we determine that complainant will probably not succeed in showing literal infringement of claims 1, 9, or 28.

iv. Infringement Under the Doctrine of Equivalents

Having found no literal infringement, we turn to the issue of infringement under the doctrine of equivalents. Although complainant's and respondents' systems both identify open and short circuits, the ALJ found that the ways in which they do so are basically very different. ID at 13. The ALJ found that respondents' testers do not perform the same function in substantially the same way as claim 1 because a step equivalent to each step of claim 1 is not found in respondents' testers. ID at 16. The ALJ explained that the step, or an equivalent to the step, of establishing an electrically conductive reference means separated from the networks by a dielectric is not found in respondents' testers, nor do respondents' testers perform the step of making impedance measurements or any equivalent measurement. Id. The ALJ's findings made in connection with the reference means and the impedance (or capacitance) measurement limitations of claim 1 also apply to claims 9 and 28.

Complainant bears the burden of proof on the issue of infringement under the doctrine of equivalents. The only evidence complainant relied upon to prove that its patent claims were infringed under the doctrine of equivalents was the testimony of Mr. Geiger. This testimony consisted of little more than a series of conclusory statements by Mr. Geiger to the effect that respondents' testers performed the same or substantially the same functions in substantially the same way to achieve the same or substantially the same results as the claimed inventions. Tr. 420-422. We find that this testimony is not sufficient to establish that complainant is likely to prove that claims

1, 9, and 28 have been infringed by respondents' testers under the doctrine of equivalents. [29]

v. Contributory and Induced Infringement

Without direct infringement there can be no contributory or induced infringement. Everpure, Inc. v. Cuno, Inc., 875 F.2d 300, 304 (Fed. Cir. 1989). Finding no direct infringement of the claims at issue by respondents' testers or respondents' methods of testing, we find that complainant is not likely to prove contributory or induced infringement of claims 1 and 28 by respondents' customers. We also rely on the ALJ's findings, discussed in the ID at pp. 14-16, concerning the evidence on the contributory and induced infringement issues to support our finding that complainant has not shown that it is likely to prove induced or contributory infringement of claims 1 and 28.

3. Domestic Industry

In order to establish a likelihood of success on the merits, complainant must establish the existence of a domestic industry related to the patent at issue. 19 U.S.C. 1337(a)(2-3). Based on complainant's significant investment in plant and equipment and significant employment of labor, Tr. 90-91, and the testimony to the effect that complainant practices the patent at issue, Tr. 364-367, we find that complainant has demonstrated that it is likely to prove that a domestic industry exists.

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[29] Consideration of the prior art in order to restrict a claim's range of equivalents is necessary under the doctrine of equivalents where an accused device satisfies the tripartite function/way/result test of Graver Tank. When the tripartite test is not satisfied, as is the case here, consideration of the prior art to determine a range of equivalents is unnecessary. See, e.g., Valmont; London v. Carson, Pirie, Scott & Co.

4. Conclusion on Probability of Success on the Merits

Since complainant has not demonstrated that it is likely to prove that respondents infringe the claims at issue, we determine that complainant has not established a likelihood of success on the merits.

B. Harm to Complainant

The Commission follows the Federal Circuit standard for issuing preliminary injunctions and considers whether complainant would suffer irreparable harm in the absence of temporary relief.[30] Under traditional equity analysis, irreparable harm is harm that cannot be remedied by monetary damages.[31] However, even though the Commission has no authority to award damages, monetary damages alone would not constitute irreparable harm under section 337 because damages are available in federal district court.[32]

The Commission considers several factors in determining whether the complainant would be irreparably harmed. These factors include complainant's delay in bringing a complaint before the Commission after becoming aware of the possible infringement, the presence of noninfringing substitutes in the marketplace, complainant's grant of licenses (because the grant of a license is incompatible with the right to exclude as the basis for the presumption of irreparable harm), and the relative market share between the parties.[33]

The ALJ found that complainant would suffer substantial harm, but not irreparable harm, if its motion for temporary relief were not granted. None

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[30] Pressure Transmitters, USITC Pub. 2392 at 15-16.

[31] 7-Pt. 2 Moore's Federal Practice 65.04[1]; Wright & Miller, Federal Practice and Procedure: Civil § 2948.

[32] Rosemount, Inc. v. USITC, 910 F.2d 819, 821 (Fed. Cir. 1990).

[33] Pressure Transmitters at 33-37.

of the parties objected to this finding, which we adopt herein. The ALJ's determination is based on complainant's delay in filing its complaint and the presence of other competitors in the marketplace. The ALJ found that the president of Integri-Test corresponded with respondents' customers pointing out their potential infringement as early as January 1990 (BSL Ex. 27) and retained patent counsel with regard to its allegations of infringement in [CBI] (Tr. 198). On January 20, 1992, Integri-Test's counsel sent letters demanding that certain customers cease infringing the '966 patent, but Integri-Test delayed until September 25, 1992, before bringing an action against respondents at the Commission. The ALJ found that this delay of over two years and one-half years made it "difficult to believe that the timing of relief that eventually may be obtained by complainant is critical to complainant's survival." ID at 18.

The ALJ found that if a temporary exclusion order issued, some of the sales taken from respondents would probably be made by complainant, but some sales might be made by other firms making different types of testers that also compete with complainant for sales. ID at 18. The record supports a finding that the marketplace contains many other suppliers of movable probe testers. (Tr. 1179-1180, Tr. 1185-86, 1190-93). In addition, the record contains evidence that complainant's product does not meet all potential customers' needs. (Tr. 668-670). Because of these factors, it cannot be assumed that complainant would make all the sales that respondents would be prevented from making, and the record does not clearly indicate how many of these sales could be expected to go to complainant.

Respondents expected to [CBI] in the United States in calendar year 1993 in the absence of temporary relief. (CX 88, p. 6). Since this investigation will likely be completed on November 2, 1993,[34] respondents could thus be expected to make [CBI] during the pendency of the investigation. However, the record supports a finding that a temporary exclusion order would probably prevent respondents from making [CBI] at complainant's expense. Complainant's owner testified that "it takes anywhere from six months to a year, from the time you identify a prospect until you can really close a sale with them" and that the present economic recession has "stretched that [time] out considerably." (Tr. 171). Currently, Integri-Test is actively speaking to [CBI] prospective customers (Tr. 123-125) and respondents are speaking to [CBI] (Integri-Test Ex. 118, p. 133); however, [CBI]. (Integri-Test Ex. 74). Thus, it is reasonable to project that, during the period of this investigation, [CBI] of respondents' sales will be made to a customer that has also been identified by complainant. While the customers that are now talking to respondents could be forced to open negotiations with another manufacturer during the pendency of a temporary exclusion order, the number of sales that would ultimately go to complainant is speculative because of the number of competitors in the marketplace.

Complainant also has licensed its patent in the past, and has established a royalty rate. (Tr. 582-585, Integri-Test Ex. 124). Even more

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[34] The statutory deadline for completion of this investigation is November 2, 1993.

significant, Integri-Test [

CBI

]. (Integri-Test Ex. 124). Under Illinois Tool Works v. Grip-Pak, 906 F.2d 679, 683 (Fed. Cir. 1990), sales lost to an infringer are no less compensable by money than sales lost to a licensee.

Circuit board testers are expensive pieces of equipment, costing from [CBI]. Complainant testified that it needed to make [CBI] sales per year to break even. (Tr. 574). Accordingly, even [CBI] would constitute substantial harm to complainant. We therefore find that complainant is threatened with substantial harm during the pendency of the investigation in the absence of temporary relief.

C. Balance of Harm Between the Parties

The ALJ found that there would be substantial economic harm to respondents if the Commission issues temporary relief, ID at 19, and none of the parties objected to the ALJ's finding. The ALJ found that Bath Scientific Ltd. is a small firm [CBI]. ID at 19. Even though respondents could import under bond during the pendency of the investigation if temporary relief were granted, customers would likely be deterred from purchasing respondents' equipment. Circuit board testers stay in use for a number of years, and customers may be reluctant to buy from a company that they suspect may not be able to continue to provide support for the equipment. We therefore find that respondents would suffer substantial harm in the absence of relief.

The record indicates that BSL and Integri-Test are both small firms [CBI]. (Integri-Test Exs. 67, Integri-

Test Exs. 88, p. 6; Tr. 116, Tr. 574). Consequently, we determine that the balance of harm in this case tips in favor of neither party. Both parties would be [CBI] substantially harmed if they do not prevail on the motion for temporary relief.

D. Effect on the Public Interest

The Federal Circuit has held that in deciding motions for preliminary injunctions, the focus of the public interest analysis should be on whether there exists some critical public interest that would be injured by the grant of preliminary relief. [35] Section 337(e)(1) requires that the Commission consider "the effect of . . . exclusion on the public health and welfare, competitive conditions in the United States, production of like or directly competitive articles in the United States, and United States consumers" before granting temporary relief.

In this case, the ALJ found that the public interest would benefit greatly if both of these small companies survived and competed in making these complex testing devices. There is nothing on the record to indicate that the public health and welfare would be affected by the grant or denial of temporary relief. The record, however, supports a finding that competitive conditions and consumer interests in the United States might be adversely affected to some degree. (Tr. 645-646, 1248-1253, 1290-1319). However, because Integri-Test has the capacity to supply the market in BSL's absence (Tr. 173) and because the market contains other manufacturers of testing equipment, we conclude that these interests would not be significantly harmed.

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[35] Hybritech v. Abbott Laboratories, 849 F. 2d 1446, 1458 (Fed. Cir. 1988).

E. Balancing the Four Factors

Our findings on the temporary relief factors in this proceeding are as follows:

1. Complainant has not shown that it is likely prevail on the merits because it has not shown that the claims at issue are likely to be found infringed.

2. Complainant has not shown that is threatened with irreparable harm if it does not obtain temporary relief.

3. The balance of harm tips in favor of neither party. Both parties will be [CBI] substantially harmed if they do not prevail on the motion for temporary relief.

4. The public interest would not be significantly harmed by issuance of temporary relief.

On balancing these factors, we find that no factor favors temporary relief, and therefore conclude that temporary relief is not warranted in this case. The factual findings in the temporary relief phase of this investigation are, of course, not binding with respect to any findings to be made by the ALJ or Commission in the permanent relief phase of the investigation.[36] [37]

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[36] University of Texas v. Camenisch, 475 U.S. 390, 395 (1981).

[37] Respondents moved for an order terminating both the temporary and permanent phases of the investigation as a sanction for complainant's alleged violation of Commission interim rule 210.5(b). We accept respondents' petition for review only of the portion of the order denying termination of the temporary relief proceedings. The remainder of the petition is not ripe. However, we deny the motion as moot in view of our denial of the complainant's motion for temporary relief.

APPENDIX

THE PATENT CLAIMS AT ISSUE

Claim 1

A method for testing rigid or flexible electrical interconnection network boards including at last two networks including terminal points and interconnecting conductors, said method comprising the steps of:

establishing an electrically conductive reference means in a predetermined electrical and geometrical position with respect to the surface containing the interconnecting conductors of the networks, and separated therefrom by a dielectric;

making measurements from terminal points of the interconnection board being tested including
at least one impedance measurement from a terminal point of each network to said reference means, and
at least a measurement of the end-to-end resistance of each network;
with either the impedance or the resistance measurement(s) being made first;

comparing said measured impedance and resistance values with the respective pre-established values for an interconnection board with no electrical faults; and

indicating faults when either
(a) said impedance measurement value is above said respective established value by more than a predetermined amount;
(b) said impedance measurement value is below said respective established value by more than a predetermined amount; and/or
(c) said resistance measurement value departs from said respective predetermined value.

Claim 9

Apparatus for testing rigid or flexible electrical interconnection network boards including at least two networks and a plurality of terminal points interconnected by electrical conductors to form a predetermined pattern, comprising

at least two independently movable probes for contacting selective terminal points of the said interconnection board being tested;

positioning means associated with at least one of said probes for positioning the same to contact selected terminal points on the interconnection board;

conductive reference means spaced from said conductor network of the interconnection board by a dielectric;

impedance measuring means connected to at least one of said probes to measure impedance between the probe connected thereto and said reference means;

resistance measuring means connected to said probes to measure electrical resistance between said probes; and

control means for moving said probes and for activating said measuring means to obtain:

(a) at least one impedance measurement from a terminal point of each network to said reference means; and
(b) at least a measurement of the end-to-end resistance of each network.

Claim 28

A method for testing interconnection boards including terminal points and interconnecting conductor networks comprising the steps of:

establishing a conductive reference plane parallel to the plane of the terminal points and interconnecting conductor networks and separated therefrom by a dielectric;

measuring the capacitance between at least one terminal point of each network and said reference plane;

comparing said measured capacitance value with the known correct value for interconnection boards with no faults therein;

indicating as a short circuit fault for any measured capacitance which is higher than the respective known correct value by more than a predetermined amount; and

indicating as shorted together any networks showing similar high values.

CERTIFICATE OF SERVICE

I, Paul R. Bardos, hereby certify that the attached OPINION OF THE COMMISSION was served upon Kent Stevens, Esq. and the following parties via first class mail, and air mail where necessry on April 5, 1993.

Paul R. Bardos, Acting Secretary
U. S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

On behalf of Complainant: **INTEGRI-TEST CORPORATION**:

Brian Brunsvold, Esq.
David W. Hill, Esq.
Stephen L. Peterson, Esq.
Wayne W. Herrington, Esq.
Doris J. Johnson, Esq.
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER
1300 I Street, N.W.
Washington, D.C. 20005-3315

For Respondents: **BATH SCIENTIFIC, LTD. and BSL NORTH AMERICA**:

William C. Rowland, Esq.
Anthony W. Shaw, Esq.
Robert S. Swecker, Esq.
Regis E. Slutter, Esq.
BURNS, DOANE, SWECKER & MATHIS
George Mason Building
Washington & Prince Streets
P.O. Box 1404
Alexandria, VA 22313-1404

Talbert F. Lindstrom, Esq.
Assistant Director for International
Antitrust
Federal Trade Commission
Room 361
Pennsylvania Ave. at Sixth Street, N.W.
Washington, D.C. 20580

Mr. Charles S. Stark
Antitrust Division
U.S. Department of Justice
Room 7115, Main Justice
Pennsylvania Ave. & Tenth Street, N.W.
Washington, D.C. 20530

Michael T. Schmitz
Chief Counsel
U.S. Customs Service
1301 Constitution Ave., N.W.
Washington, D.C. 20229

Sandra H. Shapiro, Esq.
Associate General Counsel
Department of Health & Human
Services
Room 5362, Cohen Building
330 Independence Ave., S.W.
Washington, D.C. 20201

PUBLIC VERSION

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

In the Matter of	
CERTAIN CIRCUIT BOARD TESTERS	Investigation No. 337-TA-342

INITIAL DETERMINATION ON MOTION FOR TEMPORARY RELIEF

APPEARANCES

For Complainant Integri-Test Corporation

Brian Brunsvold, Esq.
Stephen J. Rosenman, Esq.
Wayne W. Herrington, Esq.
Doris J. Johnson, Esq.
John M. Romary, Esq.
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER

For Respondents Bath Scientific, Ltd. and BSL North America

Robert S. Swecker, Esq.
William C. Rowland, Esq.
Anthony W. Shaw, Esq.
BURNS, DOANE, SWECKER & MATHIS

For the United States International Trade Commission

Kent R. Stevens, Esq.
Office of Unfair Import Investigations
U.S. INTERNATIONAL TRADE COMMISSION

On September 25, 1992, Integri-Test Corporation filed a complaint and a motion for temporary relief with the U.S. International Trade Commission. The complaint, as later supplemented, alleged that the importation of products that infringe U.S. Patent No. 4,565,966 was an unfair act violating Section 337 of the Tariff Act.

On October 27, 1992, the Commission issued a notice of investigation that was published in the Federal Register on November 2, 1992. (57 Fed. Reg. 49490.) The notice instituted an investigation to determine:

> whether there are violations of subsection (a)(1)(B)(i) of § 337 in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain circuit board testers by reason of alleged infringement of claims 1, 9 and 28 of U.S. Letters Patent 4,565,966, and whether there exists an industry in the United States as required by subsection (a)(2) of section 337.

Complainant Integri-Test Corporation is a New York corporation with its offices at 77 Modular Avenue, Commack, New York 11725. Integri-Test owns the '966 patent, and filed a complaint alleging that the respondents had infringed three claims of that patent. The respondents are Bath Scientific, Ltd., Lysander Road, Bowerhill Estates, Melksham, Wiltshire, United Kingdom SN126SP and BSL North America, 152 West Grove Street, Middleboro, Massachusetts 02346.

Section 337 of the Tariff Act required that a hearing on temporary relief be held by an administrative law judge under the Administrative Procedure Act, and one was held, ending on December 11, 1992. All parties participated in the hearing, briefed the issues, and consented to the Commission's personal jurisdiction. The facts alleged in the notice of investigation give the Commission subject matter jurisdiction under Section 337 of the Tariff Act.

The notice of investigation covers unfair practices under Section 337(a)(1)(B)(i). This section in effect prohibits the importation, the sale

for importation, or the sale after importation of articles that infringe a valid and enforceable patent. Respondents contend that the notice does not cover allegations of infringement of claims 1 and 28 which are method of use claims (as opposed to claim 9, an apparatus claim), so that the Commission has no jurisdiction over allegations of infringement of claims 1 and 28. Infringement of a method of use claim by using an imported product in the United States is covered by § 337(a)(1)(B)(i). Section 337 (a)(1)(B)(ii) covers articles made abroad by a process that infringes a U.S. patent, then imported into the United States. Claims 1 and 28 are covered by the notice of investigation because complainant has alleged that respondents infringed these claims by contributing to or inducing the infringement of these claims by their customers in the United States.

After consideration of the evidentiary record and hearing the testimony of the witnesses at the hearing, I have made findings of fact and conclusions of law. At the suggestion of the Chief Judge of the Federal Circuit the findings and conclusions are relatively brief.1/ To the extent that conclusions of law are contained in paragraphs reciting findings of facts, they are adopted as conclusions of law. To the extent that findings of fact are contained in paragraphs reciting conclusions of law, they are adopted as findings of fact.

In a case in which the complainant seeks a temporary exclusion order, the Commission has held that the issues are the same as those in a district court case in which a temporary injunction is sought. (Certain Pressure Transmitters, 337-TA-304.) The following issues must be balanced against one another: (1) the likelihood that complainant will be successful on the merits; (2) the amount of injury that would be caused to complainant in the

absence of temporary relief; (3) the amount of injury that would be caused to respondents if temporary relief were granted; and (4) the effect that temporary relief would have on the public interest.

1. The likelihood of success on the merits

a. The domestic industry

Integri-Test manufactures movable probe test systems in Commack, New York where it employs 17 people, and it buys its components from domestic sources. Based on the testimony of Mr. Conti, it is found that complainant is likely to show that the models made by Integri-Test in the United States practice all three of the patent claims in issue. Complainant's models and the way they work are described in detail in the testimony of Mr. Conti.

b. Validity of claims 1, 9, and 28 of the '966 patent

The prior art

Testing circuit boards for errors by making resistance tests and by making capacitance tests was known in the prior art. Comparing test measurements with the previously established values for a board known to be without electrical faults was taught in the Webb patent. Webb also teaches that faults are indicated when impedance or resistance measurements are above or below a predetermined amount established by comparison to tests made on a good board. (BSL Ex. 3, Col. 2, lines 10-12.)

Claim 1 of the '966 patent simply claims a combination of both tests. This is not what the applicants told the examiner that their invention was. (See Amendment filed June 19, 1985 in BSL Ex. 2.) In the patent specification and in the prosecution history of the '966 patent, the applicants described the advantages of their improvement over the prior art as combining prior art resistance and capacitance testing in a way that made it possible to use fewer

probe movements to test a circuit board for short circuits, open circuits and resistive faults. These advantages are not set forth in claim 1. This raises the question of whether claim 1 is invalid as anticipated by the prior art even though a real improvement over the prior art is disclosed in the patent specification. In addition, the issues of whether claim 1 is invalid as obvious under Section 103 or indefinite under Section 112 are raised.

Claim 1

1. A method for testing rigid or flexible electrical interconnection network boards including at least two networks including terminal points and interconnecting conductors, said method comprising the steps of:

establishing an electrically conductive reference means in a predetermined electrical and geometrical position with respect to the surface containing the interconnecting conductors of the networks, and separated therefrom by a dielectric;

making measurements from terminal points of the interconnecting board being tested including at least one impedance measurement from a terminal point of each network to said reference means, and at least a measurement of the end-to-end resistance of each network; with either the impedance or the resistance measurement(s) being made first;

comparing said measured impedance and resistance values with the respective pre-established values for an interconnection board with no electrical faults; and

indicating faults when either (a) said impedance measurement value is above said respective established value by more than a predetermined amount; (b) said impedance measurement value is below said respective established value by more than a predetermined amount; and/or (c) said resistance measurement value departs from said respective predetermined value.

Claim construction: Each claim must be construed in the same way for the purposes of validity and infringement. Claim 1, a method claim, is construed as requiring both impedance and resistance measurements on an interconnection board. There must be a separate reference means for making impedance measurements. Both sets of measurements must be compared to values established by measuring another board with no electrical faults. Claim 1 does not require that the resistance measurements and the impedance measurements be used together or that the tests be made in any order. There

must be one "method of testing" but not necessarily one piece of equipment. Prior art tests could be lined up in an assembly line and still be a single method of testing. Claim 1 requires that "at least" certain tests be made. It does not include any language requiring steps that if practiced would result in fewer probe movements.

Anticipation under Section 102 of the Patent Act

It is likely that (at least at my level) respondents will prove that claim 1 is invalid under Section 102 as anticipated or lacking novelty. Claim 1 merely aggregates the prior art. The only change found in claim 1 over the prior art is that this claim requires a "method of testing" (singular) that includes two prior art board-testing procedures. Claim 1 does not require that the two tests be used together in any way, or set forth a process that would save steps. Just putting two known procedures side-by-side in one "method of testing" amounts to no more than making two consecutive prior art tests on the same board. While the invention that the '966 applicants described to the patent examiner would have been patentable because of the disclosed advantages of using the two tests together, claim 1 did not claim these advantages.

Claim 1 is not ambiguous (except with respect to the meaning of the phrase "the end to end resistance"), and there is no other reason to read into other parts of claim 1 any limitations from the specification. Claim 1 apparently was intended to be broad. Complainant in its reply brief (at 4) addresses this problem, arguing that the advantages of combining the two methods of testing as set forth in the patent specification are inherent in claim 1. Complainant states that "claim 1 advantageously requires a smaller number of electrical tests...." But claim 1 does not require that anything be

done that would result in a smaller number of tests. Claim 1 requires at least one impedance measurement and at least a measurement of the end-to-end resistance, but there is no upper limit to the number of measurements covered by claim 1.

Before the application for the '966 patent (March 7, 1983) the prior art taught that one could make a resistance test to detect errors on a board. A prior art capacitance test could be made on the same board either before or after the resistance test. One who was just practicing the prior art could put the two prior art testers side by side and make a resistance test followed by a capacitance test on each network of a board. This would literally infringe claim 1. It is therefore likely that respondents will succeed in proving that claim 1 is invalid as anticipated by the prior art.

Section 103

Under Section 103 of the Patent Act a claim will be found to be obvious over the prior art if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

One with ordinary skill in the art in 1983 would have had at least a BS degree in electrical engineering and several years of experience in testing circuits. (Tr. 788, 1356-57.) He is presumed to know what is in the prior art, so he would have known that there was more than one way to test for faults on a circuit board, that various tests measured different things, and that they sometimes identified different faults. He would have understood that he should do more than one kind of test on a circuit board to identify all the possible faults.

There is little objective evidence of nonobviousness with respect to claim 1. There was no copying of the '966 patent, there was no evidence of long felt need for what is set forth in this claim, there had been no failure of others to accomplish the same results, and there were no unexpected results from what is claimed in claim 1. There was no persuasive evidence of public acquiescence in or widespread professional approval of the '966 patent. There was little evidence of commercial success of the patent, although complainant might have more success in selling its products if Bath were not competing for some of the same sales.

Secondary considerations are not the decisive factor in determining whether claim 1 is obvious over the prior art. It is not likely that the respondents will be able to prove by clear and convincing evidence that claim 1 is invalid for obviousness under Section 103 without further evidence that the prior art suggested combinations of the two types of testing. The Federal Circuit has held that when two pieces of prior art are combined, a claim will not be found to be invalid for obviousness under Section 103 unless any change resulting from the combination is taught or suggested in the prior art. Lindemann Maschinenfabrik v. American Hoist & Derrick Co., 730 F.2d 1452, 1462 (Fed. Cir. 1984).

The prior art Webb patent detected short circuits and open circuits with a single capacitance test for each circuit, and the Webb patent discloses the same steps for measuring capacitance as in claim 1. (See BSL Ex. 3, col. 1 and 2.) Webb also taught the use of a two probe resistance measuring system found in the prior art. But Webb did not recommend the combination of a resistance test and a capacitance test. The Webb patent noted that the capacitance test saved the time needed to check for short circuits using a

two-probe resistance measuring system by measuring each circuit against each other circuit, but it did not disclose the need to check for resistive faults that are not identified by a capacitance test.

Mr. Webb testified that one would have known in the mid-'70s and early '80s to combine different tests to test specific products (Tr. 765). Several published articles disclose combinations of electrical tests, including resistance tests and capacitance tests, to check various products. (See BSL Exs. 107A, 108, and 109.) Nevertheless, no prior art has been identified that suggests the desirability of combining resistance testing and capacitive testing of a circuit board in one method of testing. Although claim 1 may be anticipated, under Federal Circuit precedent unless further evidence is obtained, it is unlikely that claim 1 will be found to be invalid for obviousness art over the prior art.

Section 112

Claim 1 requires "at least a measurement of the end-to-end resistance of each network." This is ambiguous because there are networks with more than two end points. Because of the ambiguity, the specification can be used to construe this part of claim 1. At Column 3, lines 17-24, the specification states that in a preferred embodiment, each segment of a network is tested for continuity integrity by a resistance test which detects open faults and resistance faults. Column 4, line 15, indicates that a resistance measurement (singular) is made between terminals within the network. Column 4, line 38 suggests that in the preferred embodiment, a resistance measurement (singular) is made of each segment of the network. It appears that when the phrase "a resistance measurement" is used, it refers to any number of resistant measurements that are necessary to include a measurement of the resistance in

each segment of the network to be tested. In the same context, "the end-to-end resistance of each network" means that each segment of the network will be tested for resistance. When the resistance of each segment is known, the resistance of the network will have been tested from end to end. (Cf. Tr. 1129.)

Because of the explanation in the patent specification, it is likely that this part of claim 1 will not make claim 1 invalid as indefinite under Section 112.

Claim 9

9. Apparatus for testing rigid or flexible electrical interconnection network boards including at least two networks and a plurality of terminal points interconnected by electrical conductors to form a predetermined pattern, comprising at least two independently movable probes for contacting selective terminal points of the said interconnection board being tested; positioning means associated with at least one of said probes for positioning the same to contact selected terminal points on the interconnection board; conductive reference means spaced from said conductor network of the interconnection board by a dielectric;
impedance measuring means connected to at least one of said probes to measure impedance between the probe connected thereto and said reference means; resistance measuring means connected to said probes to measure electrical resistance between said probes; and
control means for moving said probes and for activating said measuring means to obtain: (a) at least one impedance measurement from a terminal point of each network to said reference means; and (b) at least a measurement of the end-to-end resistance of each network.

Claim construction: Claim 9 is an apparatus claim. It is construed as requiring that both impedance and resistance measurements for an interconnection board be included in one apparatus. The apparatus must contain a separate reference means for making impedance measurements.

It is not likely that the respondents will be able to prove by clear and convincing evidence that claim 9 is invalid as anticipated under Section 102 because claim 9 claims a combination of two prior art tests in one apparatus, a combination not found in the prior art, and the patent specification

discloses some novel advantages of this combination. It is not likely that respondents will be able to prove by clear and convincing evidence that claim 9 is invalid for obviousness under Section 103 because combining the two tests in one apparatus was not suggested or taught in the prior art.

Claim 28

28. A method for testing interconnection boards including terminal points and interconnecting conductor network comprising the steps of:
establishing a conductive reference plane parallel to the plane of the terminal points and interconnecting conductor networks and separated thereform by a dielectric;
measuring the capacitance between at least one terminal point of each network and said reference plane;
comparing said measured capacitance value with the known correct value for interconnection boards with no faults therein;
indicating as a short circuit fault for any measured capacitance which is higher than the respective known correct value by more than a predetermined amount; and
indicating as shorted together any networks showing similar high values.

Claim construction: Claim 28 is a method claim that is limited to measuring capacitance on an interconnection board. It requires a separate reference means, and it requires a comparison of test results to known values from a board without faults. The claim does not require that any resistance measurements be made.

Based on the evidence at the TEO hearing, all of the elements of claim 28, including the advantages of comparison of capacitance measurements to a good board to identify the faults, are disclosed in the prior art Webb patent (BSL Ex. 3) except the last clause: "indicating as shorted together any networks showing similar high values."

Mr. Webb, who was qualified as an expert witness, testified that the last clause was not disclosed in his patent but that it would have been obvious from a reading of the patent and his article. Complainant did not cross-examine Mr. Webb on this. Other evidence was offered that the point made in

the last clause of this claim initially was not grasped by the inventors of the '966 patent. It was understood earlier by Mr. Webb who worked at Honeywell (see BSL Ex. 104 at 15), and Honeywell had made a prior art machine substantially in accordance with the Webb patent (Tr. 759). Based on the testimony of Mr. Webb (Tr. 759-763), Honeywell probably disclosed to other companies this detail of how its machine worked before 1983, but respondents have not yet offered clear and convincing evidence that this particular point definitely was made public before 1983.

The principal issue raised by claim 28 is one of novelty, not of nonobviousness. Claim 28 is invalid because it lacks novelty. The only new thought in claim 28 is the last clause "indicating as shorted together any networks showing similar high values." This suggests only a new use for the exact process already patented by Webb. Anticipation under Section 102 cannot be avoided by the discovery of a new use, property, or advantage of an old process. See, for example, Jones v. Hardy, 727 F.2d 1524, 220 USPQ 1021 (Fed. Cir. 1984), and Chisum, Patents Section 3.02(3) at 26. Claim 28 is invalid as anticipated under Section 102.

c. Infringement

Respondents did not copy complainant's technology. They were making testers using charge rise time technology before the applicants for the '966 patent filed their application for a U.S. patent. (Tr. 1238.) Respondents initially did not attempt to get a patent on their own technology, but instead, they tried to keep their technology secret. (Tr. 1239.)

The Bath products that are alleged to infringe the claims are probe vehicles with instrumentation, a computer system, and software. (This case

involves only Veritrak software.) The instrumentation includes a charge rise time instrument and a continuity instrument.

The Bath CRT test: [

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In complainant's system, the amount of metal in the network affects the capacitance measurement taken with a conductive reference means, but complainant's system gives an exact number for capacitance. Although the time measurement taken by the Bath system is affected by the amount of metal in the network and this is related to capacitance, the Bath system gives no exact capacitance measurement. Factors other than capacitance, such as resistance on the network, also influence the results of the charge rise time measurement. There are other differences between a measurement of impedance or capacitance, as claimed in the '966 patent, and a measurement of charge rise time. (See Tr. 454-455 and 852-53.) Although the result (identification of open circuits and short circuits) is the same, the ways in which the tests are made are basically very different.

The Bath continuity test: [

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]. The Bath system gives no exact resistance value, only a "true/false" result.

The Veritrak Software: [

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].

Contributory or induced infringement: Complainant alleged that respondents contributed to or induced the infringement of claim 1 and claim 28 by their U.S. customers. There is no evidence in this record of inducement to infringe, which requires proof of respondent's intent to help its customers infringe. Nor is it likely that complainant will be able to prove that there was contributory infringement unless better evidence is obtained. At the time of the TEO hearing, complainant had not investigated the actual practices of Bath customers. The testimony of complainant's expert was based on a reading of respondents' manuals and sales literature. [

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Mr. Geiger, complainant's witness, suggested that respondents' vacuum chuck might be used as a reference plane to measure capacitance, but offered no evidence that any Bath customer had used it for this purpose. [

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] The preambles of claims 1, 9 and 28 require testing of interconnection boards, while the vacuum chuck was designed to hold other parts. (Tr. 470.) In the Bath system, if only two probes are used on top of the board, a flat plate is provided to hold the board. (Tr. 855-856.) [

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] If four probes are used to test both the top and bottom of a circuit board, the board would be supported at the edges by a jig. (Tr. 856.) In this configuration, no reference plane could be identified. (Tr. 471, 857, 1019.)

Both the Bath system and the Integri-Test system enable the user to find short circuits, open circuits and resistive faults, although respondents' process may use more steps to find the fault, [CONFIDENTIAL BUSINESS INFORMATION]. (Tr. 962.) While it is possible that a Bath customer could have made a direct capacitance measurement on some types of boards by connecting a network being tested to a reference plane that was connected to ground, there was no evidence that anyone did this or that anyone was encouraged by Bath to do this. (Tr. 894.) Nor was there any vigorous denial that Bath customers did this. Bath relied principally on complainant's failure to prove that Bath either used a reference plane to measure capacitance or encouraged Bath customers to use one. Without more evidence, it is unlikely that complainant will be able to show that respondents induced or contributed to infringement of claim 1 or claim 28.

Complainant need not prove contributory infringement or inducement to infringe claim 9 because claim 9 is an apparatus claim. Claim 9 requires a

finding that there is a separate reference means in respondents' imported apparatus. There was no evidence that respondents infringed claim 9 directly by providing a separate reference means in the Bath apparatus, nor was there persuasive evidence that respondents contributed to or induced infringement of claim 9.

Based on the evidence offered at the TEO hearing, it is not likely that complainant will be able to prove that respondents have infringed any of the three claims in issue either directly or by contributory or induced infringement.

The doctrine of equivalents: To infringe under the doctrine of equivalents, the infringing process or product must perform substantially the same function in substantially the same way to obtain the same result. Graver Tank & Mfg. Co., Inc. v. Linde Air Products Co., 339 U.S. 605, 85 U.S.P.Q. 328, 331 (1950).

The Bath process does not perform the same function in the same way as claim 1. A step equivalent to each element in each step of claim 1 is not found in the Bath system. The step of establishing an electrically conductive reference means separated from the networks by a dielectric is not found in the Bath system, and no equivalent step is found in the Bath system. The other steps of claim 1 require that an impedance measurement be made. The Bath method does not make an impedance measurement or any equivalent measurement. Although the amount of metal in a network contributes to the result of the Bath charge rise time measurement as well as to the impedance measurement required by claim 1, this similarity alone will not support a conclusion that the Bath process performs substantially the same function in substantially the same way as the steps set forth in claim 1. [

]. The two systems do not perform a substantially similar function in substantially the same way.

For most types of errors, the results of both tests are the same. Both tests allow the user to find open circuits, short circuits, and most resistive faults on the board. [CONFIDENTIAL BUSINESS INFORMATION]

Claim 9 requires a conductive reference means spaced from the conductor network of the board by a dialectric. Neither that element nor an equivalent element is found in the Bath apparatus for the reasons set forth under claim 1.

Like claim 1, claim 28 requires a conductive reference plane separated from the conductor networks by a dielectric, and it requires a capacitance measurement. Neither is found in the Bath process, nor is the equivalent found in the Bath process, for the reasons set forth under claim 1.

It is unlikely that complainant will be able to prove that respondents' products or processes infringe any of the three claims either literally or under the doctrine of equivalents because the Bath test does not perform substantially the same function in substantially the same way as the claims in issue.

2. **The amount of injury that would be caused to complainant in the absence of temporary relief.**

There would be substantial economic harm to complainant if the Commission does not issue temporary relief in this case. If there is a temporary exclusion order, some sales that might have been made by respondents probably would be made by complainant, but others might be made by other firms making different types of testers that compete with complainant for these sales. [

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]. But complainant waited a long time before filing a complaint with the Commission. The president of Integri-Test corresponded with Bath customers pointing out their potential infringement as early as January 1990 (BSL Ex. 27) and retained patent counsel with regard to infringement allegations in mid-1991 (Tr. 198). On January 20, 1992, counsel sent letters demanding that certain customers cease infringing the '966 patent. The complaint was filed here on September 25, 1992. This makes it difficult to believe that the timing of the relief that eventually may be obtained by complainant is critical to complainant's survival. Yet the economic harm to complainant if the Commission does not issue temporary relief in this case would be substantial.

If temporary relief is granted, it is recommended that the complainant's bond be in the amount of $41,500 for the reasons given by the Commission investigative attorney (based on the Commission's past practice).

3. The amount of injury that would be caused to respondents if temporary relief were granted.

There would be substantial economic harm to respondents if the Commission issues temporary relief. [

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]

4. The effect that temporary relief would have on the public interest.

If it were likely that complainant ultimately would succeed in proving that respondents had infringed valid patent claims, it would be in the public interest to protect the legal patent monopoly, but at my level this is not likely. The public interest in this case therefore favors respondents. I believe that the public interest would benefit greatly if both of these small companies survived and competed in making these complex testing devices. It is not as if the elimination of one or the other would be likely to lead to the development of new technology or to benefit the public in any other way. Although there was hearsay evidence that the United States Government wanted circuit-testing technology developed in the United States, competition probably would improve this technology more if both companies survived.

Balancing the four factors

The four factors relating to the likelihood of success, the harm to the parties and the public interest must be balanced against one another. [

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Although the harm to complainant would be substantial if TEO relief is not granted, complainant itself postponed bringing this action. Even if the

complainant is given TEO relief, it still would have to compete with many other companies making other types of circuit testers. The likelihood that respondents would be successful in proving that they did not infringe valid claims of the '966 patent and the public interest against giving a temporary remedy to sustain a monopoly that may not be based on a valid patent outweigh the other factors relating to harm to the parties.

If a hearing on permanent relief is held after further discovery, and if the parties are able to make a more complete record at that hearing, the findings on validity and infringement easily could change. It is not particularly fair to either side to have this case decided on the basis of a TEO record alone. After balancing the factors, it is found that no temporary exclusion order should be issued. Complainant's motion for a temporary exclusion order is denied.2/

The evidentiary record in this proceeding consists of all exhibits identified in Commission investigative staff Exhibit 00, Integri-Test Exhibit 00 and BSL Exhibit 0. The evidentiary record also includes the transcript of the testimony at the hearing. The evidentiary record is hereby certified to the Commission. The pleadings record also includes all papers and requests properly filed with the Secretary in this proceeding.

Janet D. Saxon

Janet D. Saxon
Administrative Law Judge

Issued: January 11, 1993

NOTES

1/ At the oral argument in the U.S. Court of Appeals for the Federal Circuit in an appeal from the Commission's decision under 19 U.S.C. § 1337 in Certain Plastic Encapsulated Integrated Circuits, Chief Judge Nies made the following comments:

> Before you get started, because I won't be with you again after your argument--is there anything we can do to persuade the ITC to write opinions that one can deal with? I mean, this is summer reading. You know, I could spend the whole summer on the opinion. For the benefit of those in the back, that is the opinion (holding up bound appendix containing the Initial Determination, the ALJ's Findings of Fact and Conclusions of Law, the Commission's Opinion on Issues Under Review and On Remedy, the Public Interest and Bonding, the limited exclusion order, and the cease and desists orders). That's all it is and that's impossible . . . . This is in every case from the ITC. You get numbered paragraphs up into the hundreds and hundreds, and what is this, 400 pages of an opinion, singled spaced, with footnotes on a separate index. And it's not possible to deal with it. Now district court cases are equally comparable in complexity and we get opinions that have weeded out the chaff. This is everything and that is very unhelpful to the court. Can you at least tell the people over there that this is not helpful?

Administrative law judges in this agency, unlike a district court, have been required by the Commission in the past to address every issue raised by the parties, not just important issues. This tends to make our initial determinations too long. Because the Commission recently made it clear that the record in Section 337 cases may be reviewed de novo by the Commission's staff and the Commission itself, the judges may now be able to write shorter decisions. The failure of the judge to address every issue raised by the parties does not deprive the Commission of the option of addressing every issue when it reviews the entire record.

2/ Pursuant to § 210.53(h) of the Commission's Rules, this initial determination shall become the determination of the Commission unless a party files a petition for review of the initial determination pursuant to § 210.54, or the Commission pursuant to § 210.55 orders on its own motion a review of the initial determination or certain issues therein. For computation of time in which to file a petition for review, refer to §§ 210.54, 201.14, and 201.16(d).