TC 3700 – Sample KSR Rejections

Example 1 – Modular Metalworking Tooling Apparatus:

The claim is rejected under 35 USC 103(a) over Engibarov (US 5,056,766) in view of Wharton (US 2,676, 413).

Engibarov discloses a modular tooling apparatus (precision machine vise shown in Figure 1) for performing a metalworking operation on a workpiece (milling, grinding, drilling or tapping operation – column 1, lines 6-7) comprising: a base of a metalworking machine (machining table 10), the base comprising an attachment surface (upper surface 10a), and the attachment surface comprising a first locating feature (T-slot 12); an insert (jaw support 16) associated with and separately secured to the attachment surface, the insert comprising a second locating feature (square-cornered ridges 39 and clamping member 62), and a workpiece support feature on a surface thereof (wedge member 50), wherein the second locating feature on the insert is configured to associate with the first locating feature of the attachment surface to define a location of the workpiece support relative to the base (ridges 39 fit within and against the sides of the upper neck portion 12c of the T-slot 12 and the T-shaped cross-section of clamping member 62 conforms to the cross-section of T-slot 12).

Engibarov fails to disclose or suggest that the base is configured for semi-permanent attachment to a table of a metalworking machine.

Wharton discloses a tooling apparatus (jig shown in Figure 1) that holds and locates a workpiece for performing a metalworking operation (cutting or drilling a component). The tool holder includes a base (1) provided at each end with an extension (2) in which is formed a slot (3) adapted to receive a clamping means for

securing the base on a machine base. Thus, the base of the tool holder is configured for semi-permanent attachment to the machine base.

<u>Under KSR rationale – combining prior art elements according</u> to known methods to yield predictable results:

To provide the device of Engibarov with a base configured for semi-permanent attachment to a table of a metalworking machine would have been obvious to one of ordinary skill in the art, in view of the teachings of Wharton, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (clamping) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the semi-permanent attachment used in Wharton would allow the precision machine vise of Engibarov to be temporarily attached to the table of a metalworking machine and later removed therefrom, for example, for storage purposes.

<u>Example 2 – Reclosable Food Container:</u>

The claim is rejected under 35 USC 103(a) over DeMay (US 5,411,204) in view of Collins (US 2,562,261).

DeMay discloses a reclosable food container assembled from a unitary blank (tray shown in Figures 1 and 5), the container comprising: a bottom panel (4), a first pair of opposing side panels (first and second side panels 5, 6) extending from the bottom panel; a second pair of opposing side panels (third and fourth side panels 7, 8) extending from the bottom panel; a plurality of foldable gussets (gussets 9, 10, 11, 12), each gusset connecting two adjacent side panels (Figure 4); a first pair of opposing closure panels (panels 15, 16) extending from the first pair of opposing side panels; and a second pair of opposing closure panels (panels 17, 18) extending from the second pair of opposing side panels.

DeMay fails to disclose or suggest that each of the closure panels have a hook closure device, wherein the pairs of closure panels may be closed in an arbitrary order.

Collins discloses a reclosable container assembled from a unitary blank (see Figure 2), the container having first and second pairs of opposing closure panels (closure flaps 13) having a tab formation (19) formed by notch (17) and curved outer edge (18). The pairs of closure panels may be closed in an arbitrary order since the closure panels are of identical construction.

To provide the device of DeMay with opposed pairs of closure panels each having a hook closure device so that the pair of closure panels may be closed in an arbitrary order, as suggested by Collins, would have been obvious to one skilled in the art for the following reasons:

<u>Under KSR rationale – use of known technique to improve similar devices in the same way:</u>

DeMay discloses a prior art reclosable food container upon which the claimed invention (closure hooks on each closure panel) can be seen as an "improvement" (DeMay has a closure hook on only one closure panel).

Collins teaches a prior art comparable device (reclosable food container) having opposed pairs of interlocking closure flaps, each having a closure hook for positively securing the closure flaps against separation or disengagement, wherein the closure flaps may be closed in an arbitrary order since the closure flaps are of identical construction.

Thus, the manner of enhancing a particular device (reclosable food container) was made part of the ordinary capabilities of one skilled in the art based upon the teaching of such improvement in Collins. Accordingly, one of ordinary skill in the art would have been capable of applying this known "improvement" technique in the same manner to the prior art reclosable food container of DeMay and the results would have been predictable to one of ordinary skill in the art, namely, one skilled in the art would have readily recognized that interlocking both pairs of opposed closure panels in DeMay would positively prevent their separation or disengagement.

<u>Under KSR rationale – applying a known technique to a known</u> device ready for improvement to yield predictable results:

DeMay discloses a prior art disposable food container upon which the claimed invention (closure hooks on each closure panel) can be seen as an "improvement" (DeMay only provides a closure hook on one closure panel). Collins teaches a prior art reclosable food container using a known technique that is applicable to the container of DeMay, namely, the technique of having opposed pairs of interlocking closure flaps, each having a closure hook for positively securing the closure flaps against separation or disengagement, wherein the closure flaps may be closed in an arbitrary order since the closure flaps are of identical construction.

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Collins to the food container of DeMay would have yielded predicable results and resulted in an improved system, namely, a system that would positively interlocked each pair of opposing closure panels in DeMay to prevent separation or disengagement of the panels that was not dependent upon the order of closure of the panels.

<u>Under KSR rationale – simple substitution of one known element</u> for another to obtain predictable results:

DeMay discloses a prior art reclosable food container having all the recited structure, but which differs from the claimed device in that the opposed pairs of closure panels do not each have an opposing hook closure device.

Collins discloses a prior art reclosable food container having pairs of opposed closure flaps, each having a closure hook for positively securing the closure flaps against separation or disengagement, wherein the pairs of closure flaps may be closed in an arbitrary order since the closure flaps are of identical construction.

The substitution of one known element (closure flap with a closure hook as shown in Collins) for another (closure flap without closure hook as shown in DeMay) would have been obvious to one of ordinary skill in the art at the time of the invention since the substitution of the closure flaps shown in Collins would have

yielded predictable results, namely, a positive interlocking of each opposing pair of closure panels in DeMay to prevent separation or disengagement of the panels that was not dependent upon the order of closure of the panels.

<u>Under TSM rationale</u>: Collins expressly states that interlocking closure flaps are inexpensive to form, easy to fasten or unfasten, and will <u>hold securely upon being fastened</u>. Thus, one skilled in the art would have readily recognized that providing DeMay with opposed closure panels, each having the hook closure device of Collins, would provide for enhance securement of the panels by holding the panels against movement in the direction at right angles to the notches, thereby positively preventing their separation or disengagement (column 2, lines 36-42).

Example 3 – Pocket Insert For Bound Book:

Wyant teaches a pocket insert for a book (three ring binder). The insert is to be bound along a binding (via apertures 30). The insert comprises a base sheet of paper material 22, having a binding edge 14. The device further includes a pocket sheet 24, having a perimeter defined by an attached edge section. At least a portion of the attached edge section (*i.e.* at 11) is attached by any convenient bonding method including adhesive. This is considered to comprise "fused or glued" as claimed. The pocket opening faces the binding.

Wyant does not teach that the attached edge section forms continuous two ply seams. However, Dick teaches a similar pocket having a continuous two ply seam 5. Dick further discloses that the pocket may be secured by any suitable means.

<u>Under KSR rationale – simple substitution of one known</u> <u>element for another to obtain predictable results</u>:

Folded pockets were known in the art, as evidenced by Wyant, while seamed pockets were known in the art as evidenced by Dick. One of ordinary skill in the art could have substituted the folded arrangement of Wyant with the continuous two ply seam of Dick by known methods. For example, Wyant discloses fastening at least part of a pocket (*i.e.* at 11) with adhesive, and Dick discloses fastening a pocket by any suitable means, and the results would have been a predictable use of known pocket types. Thus, it would have been obvious to one of ordinary skill in the art to replace the folded pocket with a pocket having a continuous seam.

Example 4 – Guard for a Grass Trimming Device:

Blevins teaches a guard for a grass trimming device having shaft (36), a head (10), a handle, a releasable clamp (39) slidably connected to the shaft 36, a support member (16), and guard member 20.

Blevins does not teach that the support member is slidably connected within the releasable clamp. Wright, however, teaches a guard for a grass trimming device including a support member (20) slidably connected within a releasable clamp (28).

Under KSR rationale - if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill

One of ordinary skill in the art could have substituted the slidable support member of Wright for the support member of Blevins by using a releasable clamp such as disclosed by Wright. The clamp arrangement of Wright provides both perpendicular and horizontal movement which is a known technique to allow more degrees of freedom movement of the support member.

Furthermore, the result of such a substitution would have been predictable in that the device would have increased adjustability. Thus it would have been obvious to one of ordinary skill in the art to replace the fixed support member of Blevins with a slidable support member as taught by Wright in order to improve the similar devices.

Example 5 - Remote Control Account Authorization System:

The claim is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al (USP 5,845,260) in view of Harada et al (USP 5,721,583).

Nakano et al discloses a consumer electronics device, comprising: a memory (inherent to service provider 1a, database 5a) which stores account information (user name, account information, col. 3, line 64 – col. 4, line 7) for an account holder (user, child) and sub-credit limits (preset amount, col. 6, lines 16-18) and authentication information (user ID, child identification data, col. 3, line 16, col. 4, line 13) for authorized users of the account; a authentication device (set-box 3 / remote control 6) which provides authentication information to the memory (transmit to server/processor 1, col. 4, lines 8-17); a communication link (cable, network, fig. 3); and a processor (server/processor 1), which compares received authentication information to stored authentication information to detect a match (recognize, col. 4,line 42-53), and finds an associated sub-credit limit (present amount) corresponding to the received authentication information, to enable a purchase (receive service including shopping) over the response network via the communication network up to a maximum of the sub-credit limit (preset amount) (col. 4, lines 62-67), the processor sending the account holder information over the communication link only if the match is detected and the sub-credit limit is not exceeded (recognize, col. 4,line 42-53; determine if less or equal to balance, col. 4, line 63 – col. 5, line 12, col. 5, line 39-42).

Nakano et al does not disclose the authentication /identification information includes bioauthentication information, and a bioauthentication device to provide such bioauthentication information.

Harada et al discloses that the use of a bioauthentication device (fingerprint sensor) on a consumer electronics device (remote control) to provide bioauthentication information (fingerprint) was known in the prior art at the time of the invention (col. 7, lines 14-23). Harada also discloses that that one of ordinary skill in the consumer electronic device art at the time of the invention would have been familiar with using bioauthentication information interchangeably with or in lieu of PINs to authenticate users (col. 7, lines 14-23).

It would have been obvious to one of ordinary skill in the art to include into Nakano et al bioauthentication information as the identification information and a bioauthentication device to provide the bioauthentication information, for the following reasons:

<u>Under KSR rationale – simple substitution of one known element</u> <u>for another to obtain predictable results</u>:

Nakano discloses all the structural elements of the claimed consumer electronics device and their functions except for the bioauthentication means which was disclosed in Harada. The difference lies in the substitution of Harada's bioauthentication device for Nakano's manual authentication means.

Harada discloses that it was a common problem at the time of the invention to create a remote control that would reliably ensure that the appropriate person was given access to the system, and that one of ordinary skill in the consumer electronic device art at the time of the invention would have been familiar with using bioauthentication information interchangeably with or in lieu of PINs to authenticate users (col. 7, lines 14-23), which provides a more reliable means of identification than the PINs.

Adding bioauthentication to the Nakano device does no more to Nakano's device than it would do if it were added to any other device. The function remains the same. Predictably, bioauthentication adds greater security and reliability to an authorization process.

Thus, one of ordinary skill in the art of consumer electronic devices would have been motivated to update the Nakano device with the modem authentication components of the Harada bioauthentication means and thereby gaining, predictably, the commonly understood benefits of such adaptation, that is, a secure and reliable authentication procedure.

Applicant's specification only generally describes the idea of incorporating a bioauthentication device, such as a fingerprint sensor, into a consumer electronics device and the matching function needed to compare the scanned bioauthentication information with the stored bioauthentication information (e.g., Specification, page 6, lines 6-7 and page 6, line 17 – page 7, line 2). The specification does not provide a detailed description of the implementation in hardware or software of the bioauthentication device. Furthermore, Applicant's specification does not present any evidence that including the bioauthentication device into the consumer electronic device was uniquely challenging or difficult for one of ordinary skill in the art. In other words, the substitution would be predicted as having a reasonable expectation of success.

Under TSM rationale:

Harada provides motivation for one of ordinary skill in the art to use the bioauthentication information (fingerprint, voice print) in lieu of a PIN, ie, "to prevent unauthorized tampering with [certain terminal setting] data by persons who may have access to the remote control apparatus" (Harada, col. 4, lines 32-34), "to ensure

that the type of service which is provided by a terminal apparatus to the users of its remote control apparatuses is selectively controlled in accordance with various different categories of users, e.g., adults and children" (Harada, col. 4, lines 56-60), and "to reliably ensure that certain services which should be available only to a specific individual user ... and which can be requested by operation of a remote control apparatus, will in fact be made available only to the appropriate individual, when a number of different individuals can use remote control apparatus to communicate with that same terminal apparatus" (Harada, col. 4, line 61 – col. 5, line 3). It is clear from Harada that the use of a PIN code is not as reliable an identifier as bioauthentication information, but bioauthentication information unambiguously and reliably ensures that a specific authorized user is requesting the service.

Thus, one of ordinary skill in the art would have been motivated to include the bioauthentication device of Harada with the system of Nakano because Harada teaches that it was a common problem at the time of the invention to create a remote control that would reliably ensure that the appropriate person was given access to the system. The use of a fingerprint scanner, such as disclosed in Harada, was an obvious solution to provide a more reliable means of identification than the PIN code of Nakano.