

TC 3700 Guidance in Applying KSR

Examples

October 2007

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Example 1

Modular Metalworking Tooling Apparatus

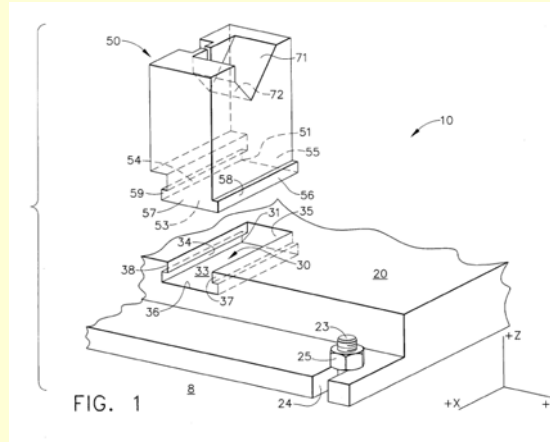
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The Invention: Modular Metalworking Tooling Apparatus

- Base (20) configured to be attached semi-permanently to a table of a metalworking machine (8).



Base (20)
Insert (50)
First Locating
Feature (30)
Second
Locating
Feature (53)
Semi-
permanent
attachment (via
24,23,25)

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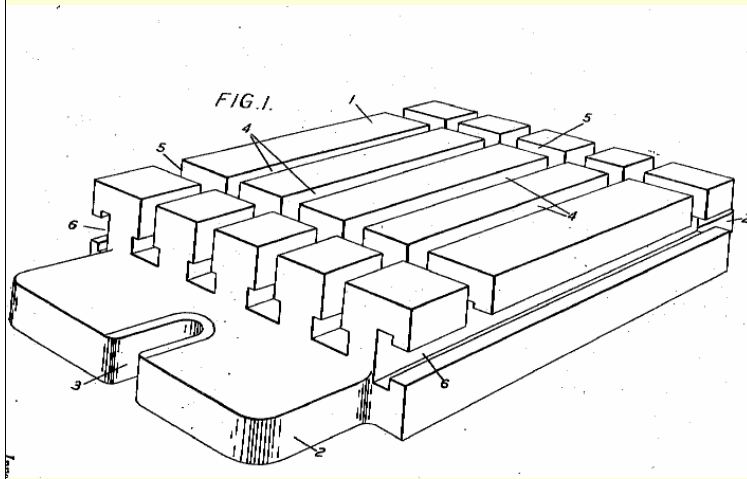
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CLAIM

- A modular tooling apparatus for performing a metalworking operation on a workpiece comprising:
 - a) a base (20) configured for semi-permanent attachment to a table of a metalworking machine, the base comprising an attachment surface, the attachment surface comprising a first locating feature (30), and
 - b) an insert (50) associated with and separably secured to the attachment surface, the insert comprising a second locating feature (53), and a workpiece support feature (71) on a surface thereof;
wherein the second locating feature (53) on the insert (50) is configured to associate with the first locating feature (30) of the attachment surface, to define a location of the workpiece support relative to the base.

Prior Art – Wharton



Base (2)
Sub-base (1)
Locating Feature (4)
Groove (3) allows semi-permanent attachment to a table.

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The Prior Art References

- Engibarov (USP 5,056,766) discloses a tooling apparatus for performing a metalworking operation on a workpiece including a base (10), attachment surface (10a), a locating feature (12), and an insert (16). The one feature lacking in Engibarov is the base configured for semi-permanent attachment to a table of a metalworking machine.
- Wharton (USP 2,676,413) discloses a tool holder which holds and locates a workpiece to be operated on, including a base (2) and a sub-base (1) configured for semi-permanent attachment to a table of a metalworking machine by clamping (col. 3, lines 41-45).
- There is no explicit disclosure in Wharton for suggesting the use of the semi-permanent attachment.

Questions

- **Q1:** Would you combine the teachings of the Engibarov and Wharton references in a 35 U.S.C. 103(a) rejection?
- **Q2:** Must one of the references provide an explicit motivation for using the semi-permanent attachment means in order to properly formulate a proper obviousness rejection?
- **Q3:** What reasonings or rationales could you use to support a conclusion of obviousness in combining the teachings of Engibarov and Wharton?

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A1: The references, when combined, teach all of the claimed features.

A2: No, the holding in KSR makes clear that it is not necessary to find motivation in the references themselves.

A3: One rationale that might be used is the obviousness of combining prior art elements according to known methods to yield predictable results. In this case, one of ordinary skill in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielding nothing more than predictable results to one of ordinary skill in the art. The predictable result being that the semi-permanent attachment of Wharton would allow the device of Engibarov to be temporarily attached to a table.

A3 (cont.): In addition, the rationale that it is obvious to use a known technique to improve a similar device in the same way or that it is obvious to apply a known technique to a known device ready for improvement to yield predictable results might be used. In this case, the use of a semi-permanent attachment would improve the Engibarov device so that it can be temporarily attached to a table which is a “known technique”. TSM (Wharton at col. 3, lines 41-45).

Example 2 Reclosable Food Container

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The Invention: Reclosable Food Container

Hook devices (200,210,220,230) allow closure of the container.

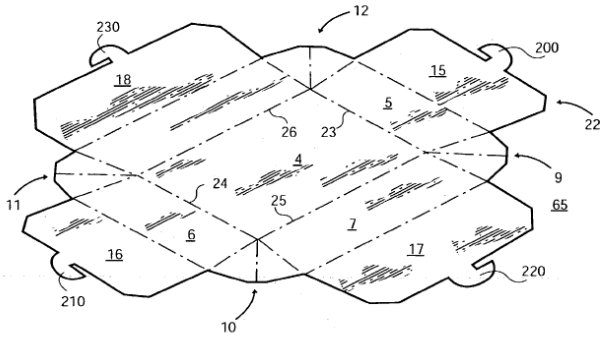
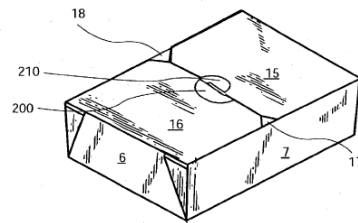
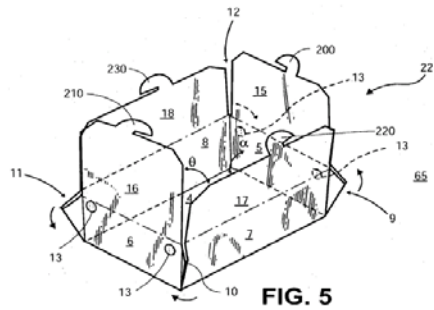


FIG. 2

- Bottom Panel (4)
- 1st pair of side panels (5,6,)
- 2nd pair of side panels (7,8)
- Foldable gussets (9,10,11,12)
- 1st pair of closure panels (15,16)
- 2nd pair of closure panels (17,18)
- Hooks (200-220)

The Invention (cont.): Reclosable Food Container

 Hook devices (200,210,220,230) allow closure of the container.



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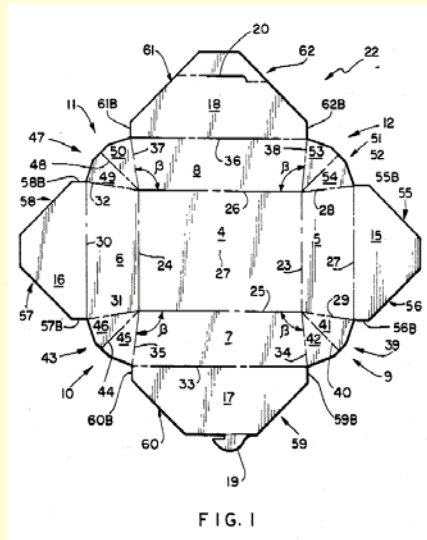
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CLAIM

- A reclosable food container assembled from a unitary blank, the container comprising:
 - a bottom panel (4), a first pair of opposing side panels (5,6) extending from the bottom panel; a second pair of opposing side panels (7,8) extending from the bottom panel; a plurality of foldable gussets (9-12); each gusset connecting two adjacent side panels; a first pair of opposing closure panels (15,16) extending from the first pair of opposing side panels and each closure panel having an opposing hook closure device (200,210); and a second pair of opposing closure panels (17,18) extending from the second pair of opposing side panels and each closure panel having an opposing hook closure device (220,230), wherein the pairs of closure panels may be closed in an arbitrary order.

Prior Art – DeMay



**Bottom panel
(4)**
**First opposing
side panels (7,8)**
**Second
opposing side
panels (5,6)**
**Plurality of
foldable gussets
(40,44,48,51)**

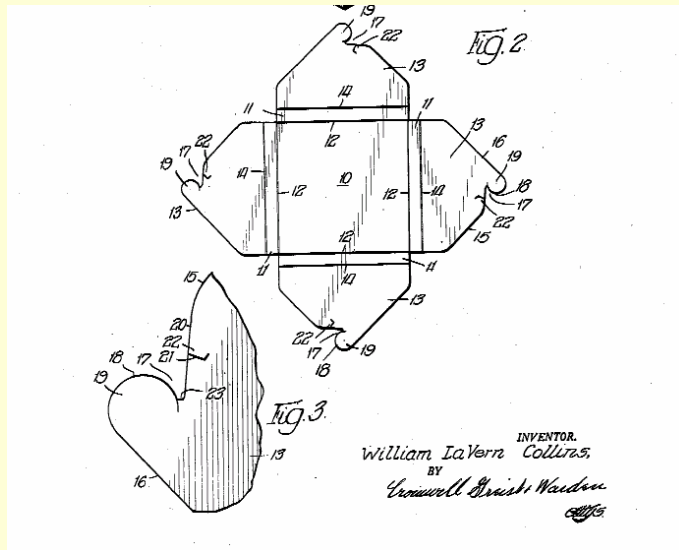
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Note hook 19 fits into slot 20 to close.

Prior Art – Collins



Bottom panel
(10)
First and
Second
opposing side
panels (13)
Second
opposing side
panels (5,6)
Plurality of
notches (17)

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The Prior Art References

- DeMay (USP 5,411,204) discloses a bottom panel (4), first pair of opposing side panels (7,8), second pair of opposing side panels (5,6), a plurality of foldable gussets (9,10,11,12), and a first pair of opposing closure panels (17,18). Therefore, DeMay teaches each of the claimed elements except for each closure panel having hook devices.
- Collins (USP 2,562,261) discloses flap forming extensions (13) having a notch (17) at the end of a tab formation (19). What is missing in Collins are the gussets as claimed, everything else is disclosed.
- Collins explicitly states that his securing flaps are inexpensive to form, easy to fasten and unfasten, and will hold securely upon being fastened (col. 1, lines 5-10).

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The DeMay panels are folded along the gussets and closed by using the hook devices.

Questions

- **Q1:** How would you combine the two prior art references in a 103 rejection?
- **Q2:** What rationales can you apply for arriving at a conclusion of obviousness in combining the teachings of DeMay and Collins?

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A1: Either reference could be used as the primary reference. DeMay is only missing the multiple hooks which are taught by Collins and Collins is only missing the gussets which are taught by DeMay. In addition, Collins provides sufficient express motivation to make the combination. “securing flaps are inexpensive to form, easy to fasten and unfasten, and will hold securely upon being fastened”.

A2: Collins discloses that his closures are an inexpensive and easy means of securely fastening a container. It would have been obvious to one of ordinary skill in the art to use Collins’ closures in the container of DeMay with an expectation that the closures would improve the secure closure of DeMay’s container in the same way that they improved the closure of Collins.

Replacing one type of known fastening system with another known fastening system is an obvious substitution of one known element for another (replacing the single hook fastening of DeMay with the Collins multiple hook fastening). The replacement would be expected to yield a device which fastens (a predictable result

TSM - - express motivation in Collins.

Example 3
Pocket Insert For Bound Book
Precedential Opinion, *Ex parte Smith*, S/N 09/391,869

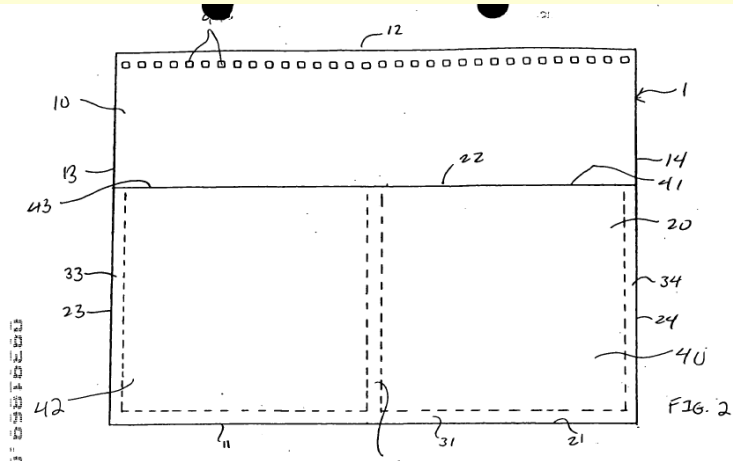
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The Invention: Pocket Insert For Bound Book

 Pockets (22) allow diskettes to be held in a book.



- Pocket Insert (1)
- Paper base sheet (10)
- Binding edge (12)
- Binding holes (for spiral) (9)
- Paper pocket sheet (20)
- Attached edges (21,23,24)
- Free edge (22)
- Adhesive (31,33,34)

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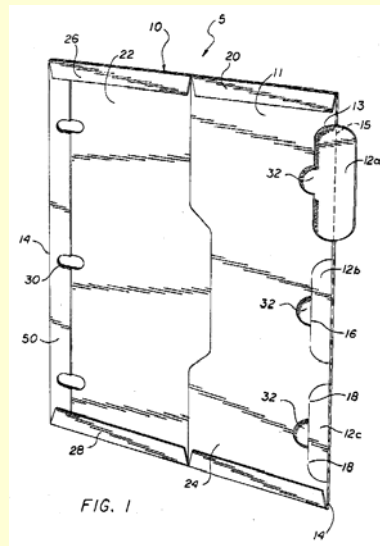
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CLAIM

- A book comprising multiple pages and a pocket insert bound along a binding, wherein the pocket insert comprises: (a) a base sheet of paper material having a length and width comparable to the length and width of a book page, the base sheet comprising a binding edge bound to the binding, the base sheet being one ply and having a planar first surface and a planar second surface; and (b) a pocket sheet of paper material being one ply, the pocket sheet having a planar inner surface, a planar outer surface, and a perimeter defined by an attached edge section on the inner surface and a free edge section on the inner surface, at least a portion of the attached edge section being one of chemically bonded, fused or glued to the first surface of the base sheet to form continuous two ply seams defining a closed pocket and the free edge section being unattached to the base sheet to form a pocket opening along the free edge section between the first surface and the inner surface of the pocket sheet, wherein the base sheet and the pocket sheet are arranged such that the pocket opening faces the binding.

Prior Art – Wyant



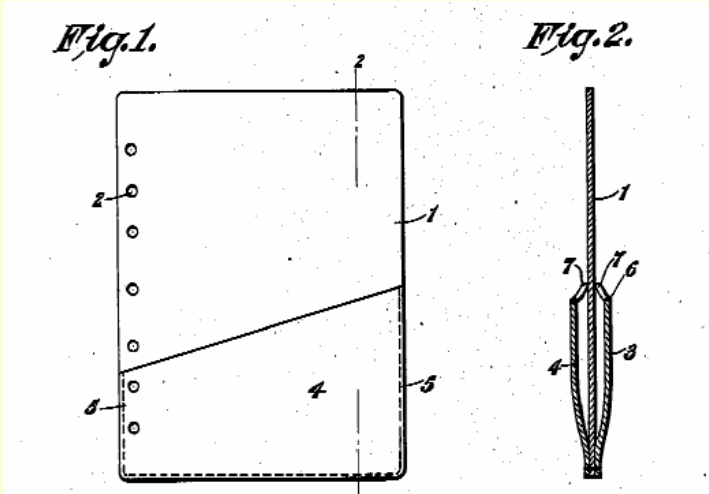
Paper base sheet (22)
Inwardly folded tab yielding panel (11)
Binding edge (14)

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Prior Art – Dick



Fly leaf (1)
Pocket (4)
Joined edges (5)



The Prior Art References

- Wyant (USP 5,540,513) discloses at least one pocket formed between a card and a tab yielding panel, wherein the card may be of any convenient size or shape (col. 2, ll. 16-20). The pocket (24) is described as facing toward apertures (30) for a three ring binder. Any convenient bonding method including adhesive can be used to secure tab yielding panel (11) to card (10). The tab yielding panel (11) is folded inward to form the pocket. The tab yielding panel and the base sheet (22) is made of one piece construction. Wyant does not disclose a continuous “two ply seam defining a pocket with a closed end” and that the two ply seam is joined by bonding, fusion or gluing as claimed.
- Dick (USP 1,495,953) discloses a two ply seam defining a pocket with a closed end (4,1). The pocket may be secured by any suitable means (p. 1, l. 90).

Questions

- **Q1:** How would you address the claim limitation related to the “chemical bonding, fused or glued” construction of the pocket?
- **Q2:** What rationales could you use in combining the prior art references?
- **Q3:** How would the requirement for tabs (12a) in Wyant impact your ability to combine the teachings of Wyant and Dick?

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A1: Wyant teaches that any convenient bonding method including adhesive could be used in order to secure the tab yielding panel to the card. Therefore, the teachings of the prior art would have allowed one of ordinary skill in the art to use the Wyant teaching of bonding to secure the Dick pocket.

A2: The substitution of the continuous, two-ply seam of Dick for the folded seam of Wyant is no more than a “simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.” *KSR*, 550 U.S. ___, 82 USPQ2d 1385 (2007). Therefore, it would have been obvious at the time the invention was made to modify Wyant’s pocket insert to attach a separate pocket sheet to a base sheet to form a pocket insert with continuous two-ply seams as taught by Dick.

A3: The Court in *KSR* noted that “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. ___, 82 USPQ2d 1385 (2007). It would take no more than ordinary creativity for a person of ordinary skill to adapt Wyant to form tabs with the base sheet and pocket sheet attached along the perimeter edge as disclosed in Dick. As noted by *KSR*: “Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”

Example 4

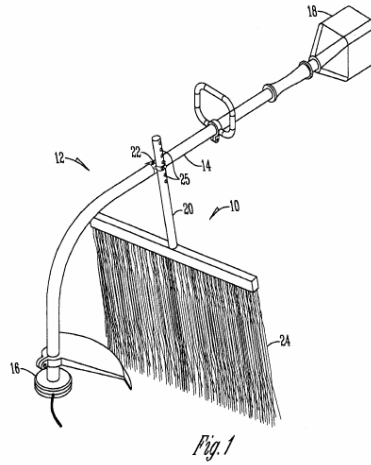
Guard for a Grass Trimming Device

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The Invention: Guard for a Grass Trimming Device



Releasable
clamp (22)

Shaft (14)

Support
member
slidably
attached to
clamp (20)

Guard member
to deflect grass
clippings (24)

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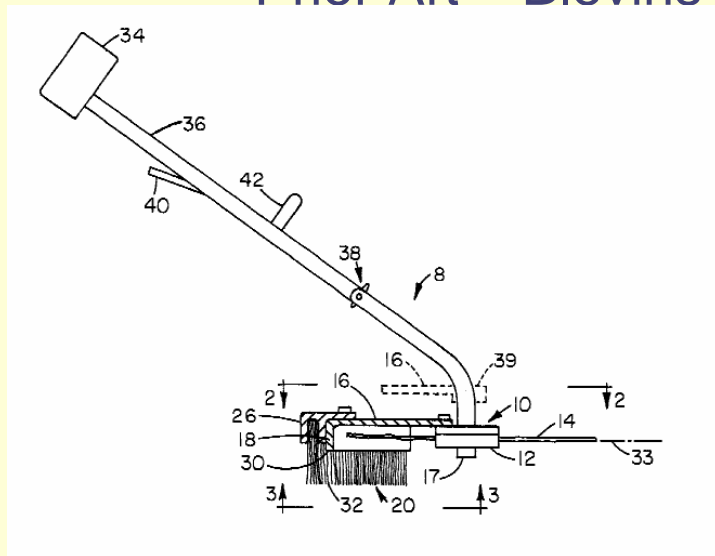
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CLAIM

- A guard for a grass trimming device having a shaft (14) with a head at one end and a handle at the opposite end, comprising: a releasable clamp (22) slidably connected to the shaft (14); a support member (20) slidably connected within the releasable clamp (22); and a guard member (24) connected to and extending outwardly from a second end of the support member (20) to deflect grass clippings projected from the head of the grass trimming device.

Prior Art – Blevins



Flexible brush guard (20)

Releasable clamp (39) slidably connected to

shaft (36)

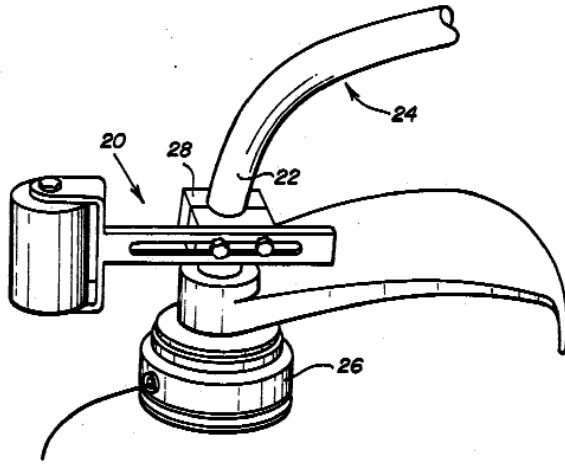
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Note that although the clamp is slidably connected, the “support member” is fixed and is not “slidably attached to the clamp”

Prior Art – Wright



Support member (20)

Clamp (28)

Shaft (22)

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The Prior Art References

- Blevins (USP 6,327,782) discloses a flexible brush guard (20) and a releasable clamp (39) slidably connected to the shaft (36) of a grass trimming device. Blevins also discloses that its guard “may be mounted on handle (36) by suitable bracket means (39)” (col. 3, ll. 49-50). Blevins does not disclose a support member that slides within the clamp.
- Wright (USP 5,107,665) discloses a support member (20) that slides within a pair of bolts and thus “within” clamp (28). 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 (20).

Questions

- **Q1:** What reasonings or rationales support a conclusion of the obviousness of combining the teachings of Blevins with those of Wright?
- **Q2:** If you chose a TSM rationale, what would be your motivation for combining references?

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A1: As noted in KSR, “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.” In addition, “Common sense teaches... that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” In addition, 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 (20).

A2: The motivation or incentive to combine Blevins with Wright is provided by their similar uses. Both devices provide means for guarding weed trimming devices from other objects. Blevins discloses a guard with a clamp that is movable up and down the shaft of a weed trimmer, but the support member is not slidably connected within the releasable clamp. However, Wright discloses a clamp arrangement that allows for a slidable connection within the clamp. The perpendicular movement allowed by the Wright clamp solves the problem that Blevins can only guard at one distance.

Example 5
Remote Control Account Authorization System
Precedential Opinion, *Ex parte Catan*, S/N 09/734,808

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The Invention: Remote Control Account Authorization

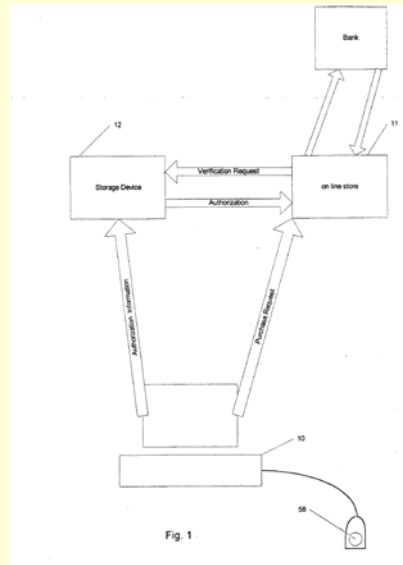


Fig. 1

Memory (12)

Bioauthentication device such as a fingerprint or voice sensor (58)

Communication link (see arrows)

Processor/PC/
Mobile phone/television (10)

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CLAIM

- A consumer electronics device, comprising: a memory which stores account information for an account holder and sub-credit limits and bioauthentication information for authorizing users of the account; a bioauthentication device which provides bioauthentication information to the memory; a communication link; and a processor, which compares received bioauthentication information to stored bioauthentication information to detect a match, and finds an associated sub-credit limit corresponding to the received bioauthentication information, to enable a purchase over the response network via the communication network up to a maximum of the sub-credit limit, 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.



The Prior Art References

- Nakano (USP 5,845,260) discloses a method of purchasing where an account authorization device includes a consumer electronics device in the home and a device for locally controlling access to an account. In addition, Nakano discloses a processor which stores in memory, account information for an account holder (col. 7, ll. 25-36), assigned sub-credit limits (or access levels) to each authorized user (col. 3, ll. 21-28), and authorization information for authorized users of the account (col. 3, ll. 10-20). Therefore, Nakano discloses all of the elements of the claim except for Nakano's authentication information is not provided by a bioauthentication device.



The Prior Art References

- Harada discloses the use of a bioauthentication device (fingerprint sensor) on a consumer electronics device (remote control) to provide bioauthentication information (fingerprint).

Questions

- **Q1:** What rationales could you use to support an obviousness rejection based on Nakano and Harada?
- **Q2:** How can you show that a “predictable result” is achieved with the combination of Nakano and Harada?

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A1: Where “[an application] claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result,” *KSR*, 550 U.S. ___, 82 USPQ2d 1385 (2007). (citing *United States v. Adams*, 383 U.S. 50-51, 148 USPQ 479, 483 (1966)).

A2: 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. This variation on Nakano’s device, whereby manual authentication is replaced by Harada’s bioauthentication means, appears to present no unexpected technological advances in the art and has a reasonable expectation of success.

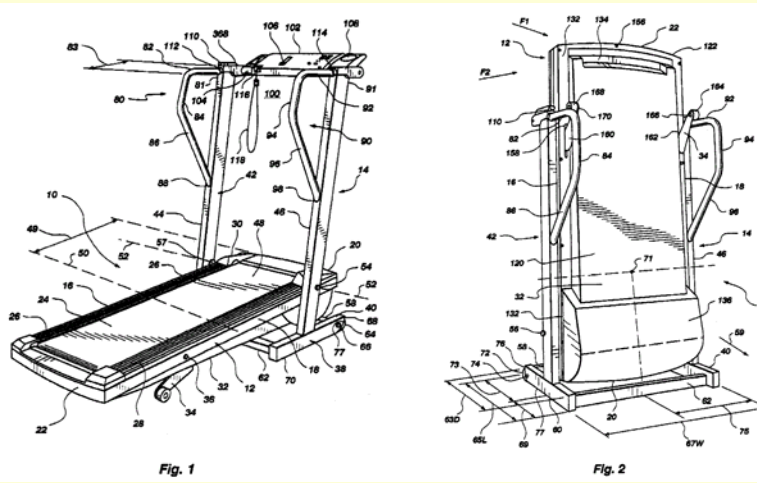
Example 6
Portable Reorienting Treadmill
In re Icon Health and Fitness, Inc.
83 USPQ2d 1746 (Fed. Cir. 2007)

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The Invention: Reorienting Treadmill



Support structure (14)

Tread base (22)

Endless belt (48)

Handle means (90)

Roller means (34)

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The Invention (cont.): Portable Reorienting Treadmill

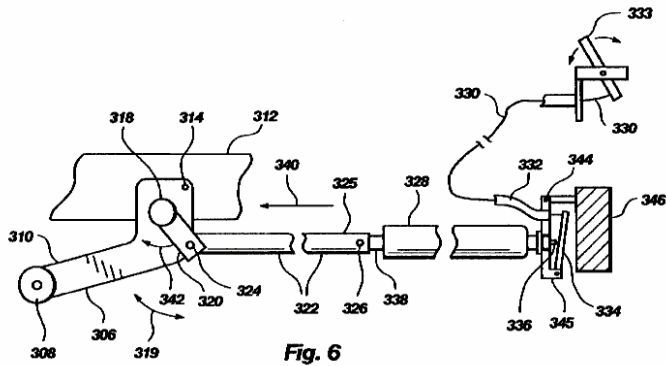


Fig. 6

Gas spring (328)

Tread base (312)

Upright structure (346)

* Purpose of gas spring is to stably retain the folding mechanism

CLAIM

- A treadmill comprising: support structure (14) having a base (38) for stably positioning on a support surface to be free standing and having upright structure (91) extending upwardly from said base; a tread base (22) having a frame that includes a front, rear, a left side, a right side and an endless belt (48) positioned between said left side and said right side, said frame being connected to said support structure to be moveable about an axis of rotation spaced from said front toward said rear between a first position in which said endless belt is positioned for operation by a user positioned thereon and a second position in which said rear of said frame is positioned toward said support structure; handle means (90) associated with said support structure positioned for grasping by a user for moving said support structure with said tread base in said second position between a use position in which said support structure has said base positioned on said support surface for stably positioning said support structure on a support surface and a moving position in which said support structure is rotatably displaced from said use position; roller means (34) adapted to said base for engagement with said support surface when said support structure is reoriented to said moving position for movement of said support structure by the user on said support surface; and a gas spring (328) connected between the tread base and the upright structure to assist in stably retaining said tread base in said second position relative to said upright structure with said tread base in said second position.

Prior Art – Damark



Wilson
Manual Treadmill

NEW!

You don't have to miss the healthful benefits of daily walks just because of bad weather, especially when you can get this Wilson treadmill at such a great low price. In the comfort of your home, you can work your cardiovascular system as well as tone and shape your legs. The large 11" x 33" walking surface has a non-skid surface for extra traction. The padded handrail provides comfort and stability. Its unique vertical folding feature and front wheels allow for easy movement and easy storage. Constructed of high-grade steel with a laminated hardwood base and ball bearing rollers.

Item No. B-4590-398683
S/H \$14.60 FREE

Mr. Sugg. Retail \$129.99
\$89⁹⁹

FREE SHIPPING
On This Item

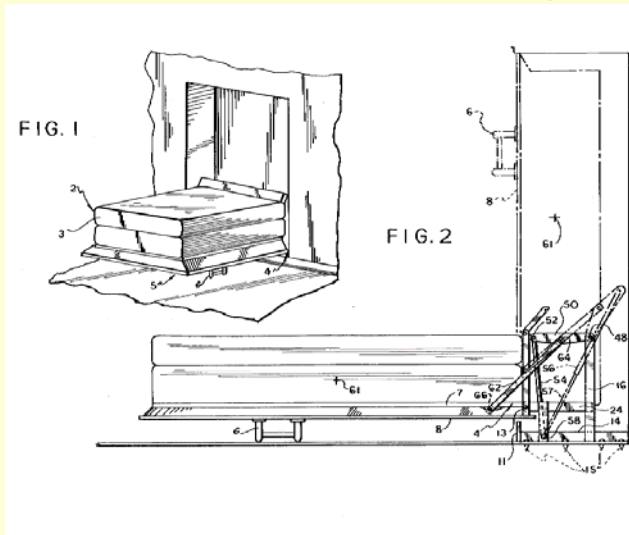
Foldable treadmill advertisement

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Prior Art – Teague



Foldable bed
(2)

Gas spring (56)

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The Prior Art References

- Advertisement by Damark International, Inc. discloses a foldable treadmill having each of the claimed features except for having a gas spring between the support structure and the tread base.
- Teague (USP 4,370,766) discloses a bed that folds up into a cabinet or recess. The reference purports to improve on the prior art counterbalancing mechanism by using a dual-action gas spring (56) rather than the prior single-action springs. Single-action springs provide a force pushing the bed closed at all times. Teague's dual-action spring, on the other hand, reverses its force as the mechanism passes a neutral position (when the center of gravity of the bed aligns vertically with the pivot point).

Questions

- **Q1:** How could you combine Damark's teachings regarding a treadmill with Teague's disclosure of a foldable bed to make an obviousness rejection?
- **Q2:** Which rationales could you use to support a position of obviousness?

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A1: Teague (bed) and the current application both address the need to stably retain a folding mechanism and therefore reasonably pertinent to solving the same problem as in the current application.

If reasonably pertinent to the problem addressed by the instant application, Teague may serve as analogous art.

From KSR: “familiar items may have obvious uses beyond their primary purposes.” 550 U.S. ___, 82 USPQ2d 1385 (2007). Analogous art to the current application, when considering the folding mechanism and gas spring limitation, might come from any area describing hinges, springs, latches, counterweights or other similar mechanisms – such as the folding bed in Teague.

A2: Combining familiar elements according to known methods to yield predictable results is a rationale which could be used to support the obviousness of the claimed invention.

Example 7

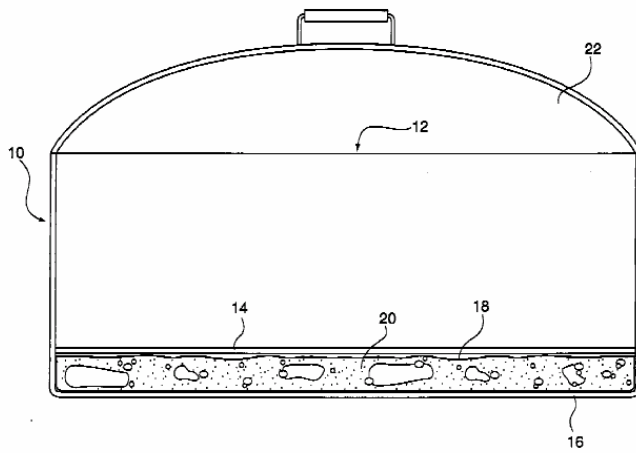
Synthetic Oil-Filled Double-Bottom Pot and Pan

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The Invention: Synthetic Oil-Filled Double-Bottom Pot and Pan



Shell (10)

First heat-conductive
plate bottom (14)

Second heat-conductive
plate (16)

Synthetic, silicon heat
transfer oil (20)

* Oil filling the cavity to
at least 95 percent of the
volume thereof

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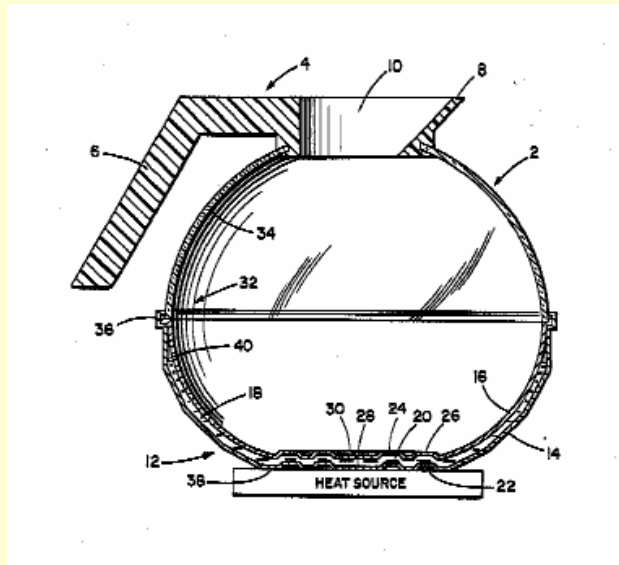
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CLAIM

- 1. A cooking container for transferring heat from an open flame or burner to food contents therein, comprising: a shell having a top opening and a first heat-conductive plate (14) bottom to distribute applied heat to food contents within said shell; a second heat-conductive plate (16) adapted for placement directly on said open flame or burner extending downwardly from said first plate in forming a sealed cavity therebetween of predetermined volume; and a synthetic, silicon heat transfer oil (20) filling said cavity to at least 95 percent of the volume thereof.
- 2. The cooking container of Claim 1, wherein said shell and said second heat-conductive plate are composed of stainless steel, and wherein said first and second heat-conductive plates are brazed together in forming said sealed cavity.

Prior Art – Proctor



Inner wall (16)

Bottom plate
(30)

Second heat
conductive
plate (28)

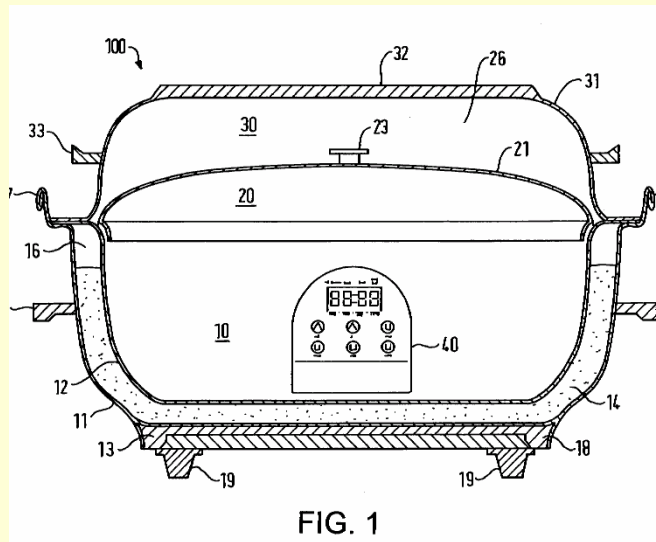
Sealed cavity
with heat
transfer liquid
(40)

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Prior Art – Park



Inner wall (12)

Silicon oil (14)

FIG. 1

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The Prior Art References

- Proctor (USP 4,629,866) discloses a coffee pot having an inner wall (16) and a heat-conductive bottom plate (30), a second heat-conductive plate (28), and an art recognized heat-transfer liquid that does not completely fill the sealed cavity (40). Proctor does not specifically teach that silicon oil is an art recognized heat-transfer liquid. In addition, Proctor does not expressly teach that the cavity is filled to at least 95 percent of its volume. Proctor only discloses that the liquid “substantially fills the sealed cavity” (col. 2, ll. 33-34). Note that the inner and outer walls are made of stainless steel. The Proctor coffee pot is adapted to be placed over a burner.
- Park (USP 6,191,393) discloses a crock pot having a double-layered structure “at least partially filled with a heat conduction medium ..., such as silicon oil or other suitable materials known to one of ordinary skill in the art” (col. 4, ll. 40-43). The sealed cavity formed between the inner and outer walls are “filled with silicon oil up to about 55 to 90% by volume” (col. 4, ll. 43-44).

Questions

- **Q1:** Would you give the limitation “adapted for” placement on an open flame or burner patentable weight? Can you use a reference disclosing a crock pot that merely sits on a counter to meet this limitation?
- **Q2:** How can you establish a prima facie case of obviousness that the claimed range of “at least 95% of the volume” is met?
- **Q3:** With respect to claim 2, Proctor does not specifically disclose that the inner and outer walls are sealed by brazing. However, Park discloses that brazing can be used to join metal components of a cooking container (col. 5, ll. 10-13). What *rationales* can be used to support a position of obviousness to address this limitation?

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A1: The phrase adapted for placement directly on an open flame or burner is a positive structural limitation, not merely a description of the intended use of the claimed invention. A crock pot would not meet this limitation because it is not capable of being placed on an open flame or burner.

A2: Both Proctor and Park teach a cavity that is “at least partially,” e.g. 55-90% (Park), or “substantially”/“not completely” (Proctor). The evidence establishes that the volume of heat-transfer material inserted into the sealed cavity is within the range of from about 55% to something less than 100% of the volume of the sealed cavity. Therefore, “Determining where in a disclosed set of percentage ranges the optimum combination of percentage lies is prima facie obvious.” *In re Peterson*, 65 USPQ2d 1379 (Fed. Cir. 2003), *In re Geisler*, 43 USPQ2d 1362 (Fed. Cir. 1997). See also *In re Aller*, 105 USPQ 233 (C.C.P.A 1955), for optimization of ranges.

A3: “Obvious to Try” - - There are a number of choices available to a person of ordinary skill in the art for joining two metals, e.g., stainless steel (The Board used official notice to find that other joining methods would be known to one of ordinary skill in the art). Therefore, “When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under 103” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007).

Example 8

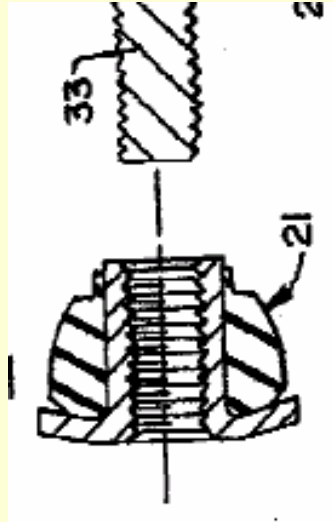
Link assembly for a suspension system

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The Invention: Link assembly for a vehicle suspension system



Stud Shaft (33)
Nut and Grommet assembly (21)

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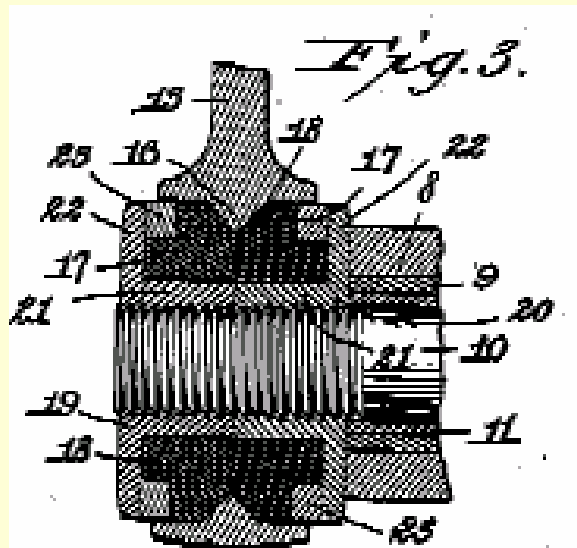
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CLAIM

- 1) A link assembly for a vehicle suspension system comprising:
 - a) a stud shaft provided with a threaded section;
 - b) at least one sleeve nut threaded onto the stud shaft,
 - c) a grommet seated on the sleeve nut;
 - d) a spacer section on the stud shaft; and
 - e) wherein the grommet and spacer section are provided with means for engaging an arm.

- 2) The link assembly of claim 1, wherein the sleeve nut includes a cup-shaped head; and the grommet is provided with a curved surface at one end complementary in shape to the cup-shaped head.

Prior Art - Borst



- Shaft (10)
- Sleeve nut (19)
- Grommet (18)
- Arm (13)

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The Prior Art References

- Borst (USP 1,952,115) discloses a link comprising: a stud shaft 10 provided with a threaded section (Figs. 1, 3, 4); at least one sleeve nut 19 threaded onto the stud shaft 10; a grommet 18 seated on the sleeve nut 19; a spacer section 9, 11, 19 on the stud shaft 10; and wherein the grommet 18 and spacer section 9, 11, 19 are provided with means for engaging an arm 13.
- Independent claim 1 was properly rejected using 102(b)
- There is no explicit disclosure in Borst for claim 2 wherein the sleeve nut includes a cup-shaped head; and the grommet is provided with a curved surface at one end complementary in shape to the cup-shaped head.



103 Rejection of Claim 2

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have each of the sleeve nuts include a cup-shaped head and each of the grommets have a curved surface at one end complementary in shape to the cup-shaped head so as to improve operability and to facilitate assembly.

Further, to provide each of the sleeve nuts including a cup-shaped head and each of the grommets having a curved surface at one end complementary in shape to the cup-shaped head represents an obvious change in shape in the components, considered to be within the level of ordinary skill in the art. In re Dailey et al., 149 USPQ 47.

Questions

Q1: Does the rejection and specifically the phrase “**so as to improve operability and to facilitate assembly**” provide sufficient rationale for combining the references?

Q2: How can the rejection be improved in view of KSR?

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A1: Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

A2: A basis for the assertion that by modifying the sleeve nut as claimed, “it would improve operability and facilitate assembly” must be provided.

Such basis may be provided in the form of interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; or the background knowledge possessed by a person having ordinary skill in the art.

Example 9 Blackjack game

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Claim

- A method of at least one player playing a game of Blackjack with a dealer comprising the steps of:
 - a) a player placing a wager to be eligible to play the game;
 - b) the dealer dealing two cards to the player and two cards to the dealer from a single deck of 52 cards;
 - c) the dealer dealing none, one or more additional cards to the player from said deck based upon an indication from the player, defining the player's hand;
 - d) The dealer dealing none, one or more additional cards to the dealer from said deck in accordance with a set of defined house rules for the game, defining the dealer's hand;
 - e) determining if the player's hand is a winning hand by comparing the player's hand to the dealer's hand;
 - f) paying the player a winning in the amount of their wager in the event the player's hand is a winning non-Blackjack hand; and
 - g) paying the player a winning in the amount of 6:5 times their wager in the event the player's hand is a winning Blackjack hand.

The Prior Art References

- Webb (US 6,305,689) - Webb teaches a blackjack game comprising playing with a single deck.
- Webb also discloses, "the house advantage varies slightly depending on the number of decks utilized A 3 to 2 payoff for a natural 21 could apply either always or only when the dealer plays. Those familiar with the art will realize that there are a variety of minor rule adjustments that can be made to achieve a desired house advantage."
- Webb also discloses, "In a casino environment, in order to compensate for an increased house advantage, payouts to a winning player may correspond to a predetermined payoff scale in accordance with the player's hand. For example, if a two-card total of the player's hand is 21, i.e., a natural Blackjack, the dealer may pay the player based on the wager above 1 to1, such as 3 to 2".
- Payoffs of 3:2 when a player's hand is a winning Blackjack hand in a single-deck Blackjack card is standard. Specification, p. 2, para. [0004].

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Questions

- **Q1:** How would you reject the claim? 102 and/or 103?
- **Q2:** What rationales can you apply if making a 103 rejection?

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A1: The payoff of 6:5 is not not explicitly disclosed so only a 103 rejection can be made.

A2: The prior art provided teaches that a payoff of anything above 1 to 1 to a player having a natural Blackjack is known in the art. In view of the teachings it would have been obvious to modify Webb's Blackjack rules by providing a payoff of anything above 1 to 1 (e.g. 6:5, 7:5, 7:6, 5:4, etc.) to a player having a natural Blackjack.

Determining exactly what payoff odds (e.g. 6:5, 7:5, 7:6, 5:4, etc.) to pay a player having a natural Blackjack is a casino business decision dependent on players' appeal for the game and desired house advantage, which is obvious in the art.