

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DONALD BLUST and THOMAS DRISCOLL

Appeal 2008-2606
Application 10/866,387
Technology Center 3600

Decided: December 1, 2008

Before JENNIFER D. BAHR, LINDA E. HORNER, and MICHAEL W.
O'NEILL, *Administrative Patent Judges*.

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DECISION ON APPEAL

STATEMENT OF THE CASE

Donald Blust, et al. (Appellants) seek our review under 35 U.S.C.
§ 134 of the final rejection of claims 1-8 and 32-39. Claims 9-31 and 40-73

are not before us because they have been withdrawn from consideration. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM-IN-PART.

THE INVENTION

The claimed invention is a process for dispensing disc-based media. As described in the Specification, an automated storage and retrieval system for renting and/or selling entertainment media, educational media, and productivity software performs the claimed process. This automated storage and retrieval system is a freestanding, fully-integrated automated business system that is not reliant on an external system for functionality. (Specification ¶ 0054 and Figures 1A and 1B). The parts of the automated storage and retrieval system that perform the claimed process are as follows: a point of sale (POS) application with a graphical user interface (GUI) following a menu-driven program that is presented on a display screen and is used for the selection of a disc-based media (Specification ¶¶ 0090-91 and 0094-103); a retrieval system that follows the commands sent by the POS application to retrieve the disc-based media (Specification ¶¶ 00105-00119); an identification and tracking system that uses a wireless communication system, such as RFID technology, to read the identification tag on the disc-based media (Specification ¶¶ 00122-00127); and the retrieval system working in conjunction with an interrogator and with a port to dispense the disc-based media (Specification ¶¶ 0061, 0088, 00106, and 00124.) The

same parts of the automated storage and retrieval system described above can also simultaneously dispense a plurality of disc-based media (Specification ¶ 0088).

THE PRIOR ART

The Examiner relies upon the following as evidence of unpatentability:

Tuttobene	US 5,273,183	Dec. 28, 1993
Tsai	US 5,939,985	Aug. 17, 1999
Miller	US 6,327,230 B1	Dec. 4, 2001

THE REJECTIONS

The following Examiner's rejections are before us for review:

Claims 1-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tuttobene.

Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tuttobene and Tsai.

Claims 32-36, 38, and 39 are rejected under 35 U.S.C. § 103(a) Tuttobene and Miller.

Claim 37 is rejected under 35 U.S.C. § 103(a) Tuttobene, Miller, and Tsai.

The Appellants argue claims 1-7 as a group. We select claim 1 as representative and claims 2-7 will stand or fall with claim 1. The Appellants argue claim 8 separately. The Appellants argue claims 32-36, 38, and 39 as

a group. We select claim 32 as representative and claims 33-36, 38, and 39 will stand or fall with claim 32. The Appellants argue claim 37 separately.

ISSUES

The Appellants contend the Examiner erred in rejecting the claims because Tuttobene's sensor system is only used for the return of media and the claimed process requires the step of reading the identification tag "at some point during the dispensing of the disc-based media" (Reply Br. 2). Further, the Appellants contend that there is no suggestion or motivation to combine Tuttobene and Miller (App. Br. 7), that Tuttobene and Miller teach away from being combined (Reply Br. 4), and that to apply the teachings of Miller to Tuttobene would require substantial modification of Tuttobene (App. Br. 7 and Reply Br. 4).

The Examiner found that based on Tuttobene using the sensors for returning the media to the vending machine it would have been obvious to use the same sensors for dispensing from the machine in order to increase verification of the dispensed media and security (Answer 4). Additionally, the Examiner found that Miller teaches dispensing selected discs in a batch and, as such, one skilled in the art would incorporate this teaching into Tuttobene in order to increase versatility and efficiency (Answer 7).

The issues before us are as follows:

Have the Appellants shown that the Examiner erred in finding that based on Tuttobene using its sensors for returning media to the vending machine it would have been obvious to use the same sensors for dispensing media from the machine in order to increase verification and security?

Have the Appellants shown that the Examiner erred in determining that one of ordinary skill in the art would have been led to modify the machine of Tuttobene with the disc trays and chute of Miller to dispense several selected discs in a batch?

FINDINGS OF FACT

We find that the following enumerated findings of fact are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Tuttobene describes an article vending machine 21 that is capable of identifying articles, video cassettes, for return prior to their insertion into the machine 21. (Tuttobene, col. 2, ll. 38-40.)
2. Tuttobene describes an exterior ultraviolet sensor 45 is located to the left and in front of the access door 43. Additionally, an interior ultraviolet sensor 46 is located to the left and behind the access door 43. Above the exterior sensor 45 is a bar code reader 47. (Tuttobene, col. 4, ll. 21-26, col. 9, ll. 20-30 and Figure 12a.)
3. Tuttobene describes that triggering the exterior sensor 45 activates the bar code reader 47. If a valid bar code is sensed, the access door 43 is then opened. The interior ultraviolet sensor 46 independently determines the validity of any object entering the machine through access door 43. If either ultraviolet sensor fails to detect an ultraviolet target, the access door 43 closes. Tuttobene describes this dual identification process provides the advantage of positively verifying

- the identity of the video cassette being returned prior to opening the access door to reduce the chance of the improper return of articles and/or vandalism against the machine (Tuttobene, col. 2, ll. 44-45, col. 4, ll. 30-45, col. 9, ll. 31-37.)
4. Tuttobene fails to disclose using the sensors 45, 46 or the reader 47 when dispensing a video cassette from access door 43. (Tuttobene, col. 10, ll. 40-63.)
 5. Tuttobene's dispensing process is as follows: The article vending machine is in a state to perform its dispensing activities. A customer slides a customer identification card through the magnetic strip reader 35. The customer can be required to enter a personal identification number (PIN) via the keypad 37. Tuttobene describes the use of the PIN increases customer security. The machine will use its modem 213 and verify the card and PIN. After verification of the card and PIN, the customer will gain access to the machine. As such, the use of the PIN would increase the machine's security because it is only after the verification process has been completed that a customer would have access to the machine. Using the keypad 39, a customer selects whether to rent or buy a video cassette. The industrial controller 187 provides the commands to the electro-mechanical components of the machine 21 in order for the electro-mechanical components to properly respond to the customer's request. The type of transaction (rental or sale) is recorded and a receipt is printed for the customer via a receipt printer 185. Upon printing of the receipt, the access door 43 opens and the video cassette is resting on shelf 135 for direct removal by the customer. (Tuttobene, col. 10, ll. 40-63.)

6. Tuttobene's identification of the videocassette by scanning the barcode and subsequent delivery of the videocassette to the proper shelf ensures the proper videocassette is in the proper shelf.
(Tuttobene, col. 11, ll. 6-8.)
7. Miller describes a disc copying and dispensing apparatus within a disc vending machine. (Miller, col. 1, ll. 5-9.) In one embodiment, Miller describes a dispensable software application program assists in recording a batch of discs and dispensing the batch of discs. (Miller, col. 2, ll. 39-44 and col. 5, ll. 19-21.) Miller describes tray 22 serves to deliver the discs to the customer. (Miller, col. 3, ll. 52-53 and col. 5, ll. 3-5.) Miller describes tray 22 has a short spindle 100 for holding a plurality of discs. (Miller, col. 5, ll. 9-11.)
8. The Examiner relies on Tsai for the teaching of an Electronic Article Surveillance (EAS) marker applied to optically recorded disc media.
(Answer 8.)

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘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.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the

prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”) The Court in *Graham* further noted that evidence of secondary considerations “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” 383 U.S. at 17-18.

“When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 like bars its patentability. For the same reason, if a technique has been used 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 his or her skill.” *KSR*, 127 S. Ct. at 1740.

Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption, or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. *See In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant’s disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. *See, e.g., Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988). Accordingly, “[R]ejections 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.” *KSR*, 127 S. Ct. at 1741 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

The Court in *KSR* held that while the teaching-suggestion-motivation is a helpful insight into the obviousness inquiry, when the test is applied as a rigid and mandatory formula, it is incompatible with Supreme Court precedents. 127 S. Ct. at 1741.

One important indicium of nonobviousness is “teaching away” from the claimed invention by the prior art. *In re Dow Chemical Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant.

In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994); *see also KSR*, 127 S. Ct. at 1739–40 (explaining that when the prior art teaches away from a combination, that combination is more likely to be nonobvious).

ANALYSIS

Claims 1-8 and 37

Independent claim 1 recites a method of dispensing disc-based media including, *inter alia*, the step of “reading an identification tag on the disc-based media.” Tuttobene describes using ultraviolet sensors for returning video cassettes, but not for dispensing the video cassettes. (Facts 1-4.) Accordingly, Tuttobene does not describe the step of reading an identification tag on media during the process of dispensing the media from the machine. (Fact 4.) The Examiner agreed, but found nonetheless that it would have been obvious to have altered Tuttobene’s system to read barcodes of the discs as they are dispensed to verify the correct items are being dispensed and to increase security. (Answer 4.) The Examiner’s reasoning for altering Tuttobene’s system to use the sensor and reader for the dispensing process is based on hindsight reconstruction of the claimed process and not on the disclosure of Tuttobene. As stated above, Tuttobene’s operation during the dispensing process does not use the sensors or the reader. (Fact 4.) Tuttobene provides a clear process for dispensing video cassettes that ensures the proper video cassette is dispensed to the proper customer and that does not include using a sensor or reader to read an identification tag on the cassette. (Fact 5.) Tuttobene describes a customer will slide his or her identification card and then proceed to enter his or her personal identification number. Tuttobene describes that the use of both an identification card and PIN ensures great customer security. In addition, this process provides vending machine security because, as Tuttobene describes, prior to the customer gaining access to the machine, the machine itself has the identification card and PIN verified off-site. Once the customer has

access to the machine, the customer can request the rental or sale of a video cassette. Tuttobene describes the industrial controller commands the machine to give the proper responses to the customer's request. Tuttobene describes records are kept and delivered to the customer which provides yet another layer of security for the machine and customer. Further, this process ensures that the proper video cassette is dispensed because the industrial controller is programmed to give the proper menus and command the proper responses from the machine. (See Fact 5.) As such, Tuttobene's identification of the videocassette by scanning the barcode and subsequent delivery of the videocassette to the proper shelf ensures the proper videocassette is in the proper shelf. (Fact 6.) Once the user selects the desired video cassette via the menu, the system in Tuttobene presumably controls the position of the shelves 135 so that the proper video cassette is dispensed through the door. As such, it would unnecessary to modify to Tuttobene to read the barcodes to verify that the correct video cassettes are being dispensed. The Examiner does not rely on Tsai to cure the deficiencies of Tuttobene (Fact 8). For these reasons, the Appellants have shown the Examiner erred in determining it would have been obvious to alter the operation of Tuttobene to use the sensors and bar code reader of Tuttobene during dispensing of video cassettes for the reasons of verification and security since Tuttobene as constructed provides able verification and security to the machine and customer through the described dispensing process. Accordingly, the Examiner's rejections of claims 1-8 and 37 are not sustained.

Claims 32-36, 38, and 39

Claim 32 recites a method of dispensing disc-based media including the steps of selecting a plurality of disc-based media, retrieving the plurality of selections, and dispensing the plurality of selections at the same time through a port. Notably, claim 32 does not include the step of reading an identification tag on the disc-based media that was present in claim 1. The Appellants do not argue that one of ordinary skill in the art would not be able to modify Tuttobene with the teachings of Miller. Instead, the Appellants argue that to apply the Miller's teachings to Tuttobene would require a substantial modification to Tuttobene's vending machine in order for it to dispense more than one video cassette at a time. (Reply Br. 4 and App. Br. 7.) However, in order for Tuttobene's dispensing process to meet the claimed process, the only structural modification to the vending machine that would be required is an enlargement of the access door 43. By increasing the height of the access door 43 to twice its height, two adjacent video cassettes could be dispensed. *KSR* only requires that the modification not be beyond the skill level of an artisan. *See KSR* at 1740. The Appellants have not argued that the modification to Tuttobene is beyond the skill level of an artisan. Instead, the Appellants argue the modification would be substantial. A modification is not necessarily beyond the skill level of an artisan because the modification is substantial in nature. Accordingly, the Appellants' argument that the modification to Tuttobene would be substantial in nature does not show an error in the Examiner's rejection because the Appellants have not shown that the modification would be beyond the level of one having ordinary skill in the art.

The Appellants further argue that there is no motivation or suggestion to combine Tuttobene and Miller and that the two references teach away from their combination. (App. Br. 7; Reply Br. 4). *KSR* instructs that the teaching-suggestion-motivation (TSM) test is not the only manner of establishing a prima facie case of obviousness with a combination of references. *KSR* expanded the rationale for establishing a prima facie case of obviousness. The Examiner is required only to provide reasoning with a rational underpinning in order to satisfy the requirement of establishing a prima facie case of obviousness. *KSR* at 1741. In this case, the Examiner provided a sufficient reason with a rational underpinning, *viz.*, that one having ordinary skill in the art would have been led to modify the machine of Tuttobene with the teachings of Miller “for the purpose of increasing versatility and efficiency.” (Answer 7.) As our reviewing court has stated, one may combine references to create a product that is more desirable because it is “faster ... or more efficient.” *See Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356 (Fed. Cir. 2006); *see also Sandt Tech., Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344, 1355 (Fed. Cir. 2001). In the instant case, applying the teachings of Miller to Tuttobene would make Tuttobene’s machine faster or more efficient; or, as the Examiner reasoned - increase versatility and efficiency, by allowing multiple cassettes to be dispensed at one time in a batch.

The Appellants state “Tuttobene and Miller teach away from being combined.” (App. Br. 7.) A reference will teach away when one of ordinary skill in the art would be discouraged from the path set out in the reference or would be led in a direction divergent from the path taken by the Appellants. The Appellants appear to posit that because Tuttobene discloses dispensing a

single video cassette and Miller's disclosure teaches batch dispensing the combination of Tuttobene and Miller teach away from each other. (App. Br. 7.) However, we do not see how nor has the Appellant further developed why Tuttobene and Miller teach away from each other, other than Tuttobene dispenses a single article and Miller dispenses plural articles. Simply that there are differences between two references is insufficient to establish that such references "teach away" from any combination thereof. *See In re Beattie*, 974 F.2d 1309, 1312-13 (Fed. Cir. 1992). Accordingly, the Appellants' statement that "Tuttobene and Miller teach away from being combined" does not show that the Examiner erred in the rejection.

For the reasons above, the Appellants have not shown that the Examiner erred in rejecting claims 32-36, 38, and 39 as being unpatentable over Tuttobene and Miller.

CONCLUSIONS

The Appellants have shown that the Examiner erred in finding that based on Tuttobene using its sensors for returning media to the vending machine it would have been obvious to use the same sensors for dispensing from the machine in order to increase verification and security.

The Appellants have not shown that the Examiner erred in determining that one of ordinary skill in the art would have been led to modify the machine of Tuttobene with the disc trays and chute of Miller to dispense several selected discs in a batch.

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DECISION

The Examiner's rejections under 35 U.S.C. § 103(a) of claims 1-8 and 37 are reversed.

The Examiner's rejections under 35 U.S.C. § 103(a) of claims 32-36, 38, and 39 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

JRG

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