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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GARY GANGHUI TENG

Appeal 2015-004347
Application 11/599,734
Technology Center 2800

Before LINDA M. GAUDETTE, DONNA M. PRAISS, and
LILAN REN, *Administrative Patent Judges*.

PRAISS, *Administrative Patent Judge*.

DECISION ON APPEAL¹

Appellant² appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 33–43 under 35 USC § 103(a) as follows:

1. Claims 33 and 35–42 over Onuma,³ Mori,⁴ Fuhrmann,⁵ and Blake;⁶

¹ In our Decision herein we refer to the Specification filed November 15, 2006 (Spec.), the non-final Office Action appealed from mailed July 31, 2014 (Act.), the Appeal Brief filed September 9, 2014 (App. Br.), the Examiner's Answer mailed January 2, 2015 (Ans.), and the Appellant's Reply Brief filed February 28, 2015 (Reply Br.).

² The real party in interest is identified as the inventor and applicant, Gary Ganghui Teng. App. Br. 2.

³ Onuma et al., US 6,543,348 B2 issued Apr. 8, 2003.

⁴ Mori, US 2002/0088360 A1 published July 11, 2002.

⁵ Furhmann et al., US 5,413,043 issued May 9, 1995.

⁶ Blake et al., US 6,726,433 B1 issued Apr. 27, 2004.

2. Claim 34 over Onuma, Mori, Fuhrmann, Blake, and Teng;⁷
3. Claim 43 over Onuma, Mori, Fuhrmann, Blake, and DeMoore.⁸

App. Br. 7. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The invention is directed to a lithographic printing press. Spec. 1. Claims 33, 34, and 43 are representative of the claims on appeal and are reproduced below from the Claims Appendix to the Appeal Brief:⁹

33. A lithographic printing press comprising:

(a) a plate cylinder mounted with a lithographic printing plate comprising on a substrate a photosensitive layer soluble or dispersible in ink and/or fountain solution and capable of hardening upon exposure to a laser having a wavelength selected from 200 to 1200 nm;

(b) an exposure means capable of emitting said laser to imagewise expose said mounted plate; and

(c) an inking means comprising an inking unit or both an inking unit and a fountain unit;

(d) wherein at least said plate mounted on the plate cylinder is within a compartment shielded with covers and other press parts so that no or less than 10% of the room light with wavelength of shorter than 450 nm reaches the plate mounted on the plate cylinder; and said plate is in the form of continuous web with one end rolled out from a fresh roll of plate in a light-tight cartridge and the other end rolled into a used roll in a second cartridge, both cartridges are installed within the plate cylinder with the portion of the plate between the cartridges being mounted on the plate cylinder, and said plate is capable of unwinding from the light-tight cartridge and winding into the second cartridge at the beginning of a printing operation.

⁷ Teng, US 6,387,595 B1 issued May 14, 2002.

⁸ DeMoore, US 5,540,152 issued July 30, 1996.

⁹ We will limit our discussion to independent claim 33 and dependent claims 34 and 43. Appellants do not separately argue the patentability of dependent claims 35–42. App. Br. 8–19. In accordance with 37 C.F.R. § 41.37(c)(1)(iv), claims 35–42 will stand or fall together with independent claim 33 from which they depend.

34. The lithographic press of claim 33 wherein said laser is a violet or ultraviolet laser with a wavelength of from 200 to 430 nm.

43. The lithographic press of claim 33 wherein said compartment comprises at least one removable window to allow opening a portion of the covers.

Claim 33

Regarding claim 33, the Examiner makes the following findings of fact which are supported by a preponderance of the evidence on this record:

Onuma establishes that at the time of the invention, it was known in the lithographic printing press art to mount a lithographic plate on a plate cylinder, expose the mounted plate with a laser beam to print an image on the plate mounted on the plate cylinder, and shield the plate cylinder compartment with covers. Act. 3 (citing Onuma Figs. 3, 4A, 4B, items 10, 21, 39, 40, 3:1–2).

Mori evidences that at the time of Appellant's invention, it was known in the art to form a plate as a continuous web with one end rolled out from a fresh roll of plate and the other end rolled into a used roll in which both rolls are installed within the plate cylinder such that the portion of the plate between the rolls is mounted on the plate cylinder and the plate is capable of unwinding and winding at the beginning of a printing operation so that it is automatically exchanged at a certain frequency. *Id.* at 4 (citing Mori ¶¶ 4, 5). Mori also teaches that a photosensitive layer soluble or dispersible in ink and/or fountain solution water soluble or dispersible overcoat on the photo sensitive layer capable of hardening upon exposure to an infrared laser which has a wavelength in the range from 200 to 1200 nm. *Id.* (citing Mori ¶¶ 54, 71, 92, 94).

Fuhrmann evidences that at the time of the invention, it was known in the art to use a cartridge to easily change out used printing web. *Id.* at 5 (citing Fuhrmann Fig. 1, item 130, 2:23–28).

Blake evidences that at the time of the invention, it was known to handle plates in a light-tight environment in order to prevent unintentional exposure of the photosensitive plate, and specifically teaches putting printing plates in a light-tight cassette. *Id.* (citing Blake 2:18–20, 3:67–4:1).

Based on the above findings of fact, the Examiner concludes it would have been obvious to one of ordinary skill in the art “to modify the printing plate of Onuma to include on a substrate a photosensitive layer soluble or dispersible in ink and/or fountain solution water soluble or dispersible overcoat on said photosensitive layer capable of hardening upon exposure to a laser having a wavelength selected from 200 to 1200nm as taught by Mori in order to manufacture a printing plate for use in a printing press.” *Id.* at 4 (citing Mori ¶ 92). The Examiner reasons that it would have been obvious to modify Onuma based on Mori’s teaching “to use the internal printing plate in the roll form stored within the cylinder in order to have the advantage of being able to automatically exchange the plates at a certain frequency.” *Id.* at 4–5. The Examiner also concludes that it would have been obvious to “to modify the plate of Onuma and Mori to be inside a cartridge in order to easily change out used printing web as suggested by Fuhrmann.” *Id.* at 5 (citing Fuhrmann 2:23–28). The Examiner further concludes that it would have been obvious to one of ordinary skill in the art to “modify the lithographic plate of Onuma to be housed in a light-tight cassette in order to prevent unintentional exposure of the photosensitive plate as suggested by Blake.” *Id.* (citing Blake 2:18–20).

Appellant does not dispute the above findings of fact with respect to Onuma, Mori, and Fuhrmann, but disputes whether the cassette of Blake is light-tight. According to Appellant, the cassette of Blake “is actually not light-tight when the plate is fed to the imager” and the design of Blake is for an imager and not a

printing press. App. Br. 12. Appellant argues that none of the cited references therefore teaches a light-tight cartridge. *Id.* Appellant also argues that none of the references “discloses a press which is capable of handling a plate which is unsafe under room light” or “shows a desire of using a plate which is unsafe under room light on a printing press” because Blake teaches a plate handler before the plate is put on press for printing. *Id.* at 13.

Appellant further contends the Examiner reversibly erred in rejecting the claims because each of Mori, Fuhrmann, and Blake cannot be combined with Onuma because Onuma’s plate is in the form of a sheet rather than a roll like Mori and Fuhrmann (*id.* at 15) and because there is “no need for using a light-tight plate cassette as disclosed by Blake” when “there is no mention of safe light requirement in Onuma” (*id.* at 16). Similarly, Appellant argues that each of Mori and Fuhrmann cannot be combined with Blake because Mori and Fuhrmann have “no need for using a light-tight plate cassette as disclosed by Blake” (*id.* at 17, 18).

In the Reply Brief, Appellant further argues that “Blake et al. is not light-tight during handling, because a removable cover of the cassette needs to be removed before the plate is picked up by the picker from the cassette to feed to the imager.” Reply Br. 2, 4.

We are not persuaded by Appellant’s argument that the combination of Onuma, Mori, Fuhrmann, and Blake does not disclose all of the elements of claim 33 including the light tight cartridge. The Examiner’s finding that “Blake directly discloses the desire to prevent unexposed light sensitive plate from being subject to incident room light” is supported by Blake’s disclosure. Ans. 4 (citing Blake 2:10–20). Blake states “[t]hese functions [handling unexposed plates] are optionally performed within a covered light-tight environment to prevent unintentional exposure of the light sensitive plate surface.” Blake 2:18–20. Indeed Blake further

states “[c]overs and doors (not shown) are provided to enclose the entire handler frame to maintain the cassette in a light tight environment.” *Id.* at 11:48–50.

Appellant’s argument that Blake’s plate is exposed to incident room light during handling because a picker picks a plate from the cartridge and delivers the plate to an imaging engine also disregards that the handler, picker, and imaging engine are all within the platesetter 16 shown encompassed in a box in Figure 1 of Blake. In addition, Appellant’s argument distinguishing the operation of Blake is unpersuasive because, in a determination of obviousness, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. *Merck & Co. v. Biocraft Labs.*, 874 F.2d 804, 807 (Fed. Cir. 1989). “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Similarly, Appellant’s arguments against the combination of the references are unpersuasive because Appellant distinguishes each of the cited prior art references separately and disputes the propriety of their combination based on whether their disclosed features can be bodily fused together. Appellant does not dispute the Examiner’s reasons for combining the references to modify Onuma. The Examiner provides a persuasive reason for combining each reference to modify Onuma’s printing press based on the teachings of the references themselves. Regarding Appellant’s argument that Blake teaches a cartridge for feeding an imager and not a printing press (App. Br. 12), the Examiner finds that “all of the references are considered to be directed to the ordinary artisan working in the art of printing using light sensitive plate.” Ans. 5. Each of Onuma, Mori, and Furhmann exposes the plate to laser irradiation for forming an image and

Blake explicitly states that its teachings are applicable to “photosensitive lithographic printing plates recorded by light exposure.” Blake 12:4–5. Additionally, Appellant does not dispute the Examiner’s finding that Onuma teaches a plate within a compartment shielded by covers and other press parts so that no or less than 10% of the room light with wavelength of shorter than 450 nm reaches the plate mounted on the plate cylinder. *See* Act. 3 (citing Figs. 4A and 4B, item 21). Therefore, the preponderance of the evidence supports the Examiner’s finding that the combination of Onuma, Mori, Furhmann, and Blake teaches or suggests each of the elements of claim 33.

For the reasons stated above and in the Answer, including the Response to Argument, we affirm the Examiner’s decision to reject claim 33 under 35 U.S.C. § 103(a) as unpatentable over the combination of Onuma, Mori, Furhmann, and Blake.

Claim 34

Regarding claim 34, which depends from claim 33, the Examiner finds that “Teng teaches sensitizing a plate to a violet laser with a wavelength of from 200 to 430nm in order to image a lithographic plate” as required by claim 34. Act. 6. The Examiner further finds that it would have been obvious to further modify Onuma by making the plate sensitive to a violet laser because such lasers have easy availability as taught by Teng. *Id.* at 6–7 (citing Teng 7:55–8:3).

Appellant asserts the rejection of claim 34 is improper for the same reasons discussed above with respect to independent claim 33. App. Br. 20. In addition, Appellant asserts that “[b]ecause the plate of Teng ’595 has excellent white light stability, there is no need to put the plate in a light-tight cartridge in order to image the plate on press as required by the claims.” *Id.* at 21. Appellant also argues that “[a] person with ordinary skill in the art would not rely on Teng ’595 for choosing

a laser (as such laser is disclosed in Teng '595 for imaging a plate which has excellent white light stability)” *Id.* In the Reply Brief, Appellant asserts that “Teng does not teach that the laser of claim 34 (violet or ultraviolet laser) is preferred over other laser (such as infrared laser).” Reply Br. 6.

We are not persuaded by Appellant’s arguments for the reasons discussed above in connection with independent claim 33. Appellant’s arguments also are unpersuasive because Onuma teaches using a laser beam for exposing a plate and the Examiner finds that it would have been obvious to one of ordinary skill in the art to select a violet laser beam because Teng teaches a violet laser has easy availability. Appellant does not dispute that a violet laser is easily available or that one of ordinary skill in the art would not have selected a violet laser for any reason. Therefore the preponderance of the evidence on this record supports the Examiner’s reason for combining Teng’s teaching about a violet laser with the printing press taught by Onuma as modified by Mori, Fuhrmann, and Blake.

Claim 43

Regarding claim 43, which depends from claim 33, the Examiner finds that “DeMoore teaches a compartment comprising at least one removable window in order to allow an operator access for maintenance, clean up and visual inspection of infrared lamps.” Act. 7 (citing DeMoore 6:21–41). The Examiner further finds that it would have been obvious to modify the combination to include a movable window “to enable the operator to view inside the press during operation” as taught by DeMoore. *Id.* at 7–8. DeMoore states “[o]ne purpose of the sheet control window W is to permit the press operator to observe the freshly printed sheets as they are transported along the transfer path.” DeMoore 6:15–17. DeMoore also states “[a]nother purpose of the sheet control window W is to admit ambient air

and to provide operator access to the inside of the delivery convey housing for clean-up and repair.” *Id.* at 6:21–24.

Appellant asserts the rejection of claim 43 is improper for the same reasons discussed above with respect to independent claim 33. App. Br. 22. In addition, Appellant asserts that there is no need to install a window as taught by DeMoore into the press of Onuma, Mori, Fuhrmann or Blake because none of the references “has a problem of accessing to the inside of the press under room light.” *Id.* at 23. In addition, Appellant argues that because DeMoore teaches a transparent window, it “does not meet the definition of ‘window’ described in the instant application.” *Id.* at 24. In the Reply Brief, Appellant contends that “there is no apparent motivation to combine” DeMoore with Onuma, Mori, Fuhrmann, and Blake because “there is no apparent need or motivation to install such a window on the press of Onuma et al, Mori, or Fuhrmann et al to solve any issue suggested by the references.” Reply Br. 6–7.

We are not persuaded by Appellant’s arguments for the reasons discussed above in connection with independent claim 33. Appellant’s arguments also are unpersuasive because claim 43 recites “one removable window” and Appellant does not direct us to any portion of the Specification that would give the term “window” a definition other than its ordinary meaning of an opening that usually contains a sheet of glass.¹⁰ Even if claim 43 required the recited “window” to selectively transmit a particular wavelength, the record does not show that it would be beyond the skill of one of ordinary skill in the art to select a material for the

¹⁰ See The American Heritage Dictionary of the English Language (5th ed. 2016) (Window: “1.a. An opening constructed in a wall, door, or roof that functions to admit light or air to an enclosure and is often framed and spanned with glass mounted to permit opening and closing”).

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window that is light safe for the particular photosensitive plate of the press. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”). In addition, the motivation to combine identified by the Examiner comes from DeMoore and not the other references.

For the reasons stated above and in the Answer, including the Response to Argument, we affirm the Examiner’s decision to reject claims 33–43.

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

AFFIRMED