NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: ROBERT D. KROSS,
Appellant

2020-1056

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/275,400.

Decided: August 11, 2020

EDWIN DAVID SCHINDLER, Huntington, NY, for appellant.

MARY L. KELLY, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for appellee Andrei Iancu. Also represented by THOMAS W. KRAUSE, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before PROST, *Chief Judge,* NEWMAN and O'MALLEY, *Circuit Judges.*

O'MALLEY, *Circuit Judge*.

Appellant Robert D. Kross ("Kross") appeals the Patent Trial and Appeal Board's ("Board's") determination that claims 31–50 of Kross's patent application, No. 13/275,400

("the '400 Application"), would have been obvious under 35 U.S.C. § 103(a). For the reasons explained below, we *affirm* the Board's decision.

BACKGROUND

The '400 Application relates generally to non-gelatin viscoelastic printing plates and the use of such plates in monotype printing. A monotype print is typically made by pressing a piece of paper against an inked surface. A stated objective of the purported invention is to provide a reusable, durable, and readily-cleanable gel printing plate that artists may be able to use "without a need for a press or other type of pressure tool." J.A. 19. Kross contends that the purported invention overcomes the problems of "cracking, splitting and just plain 'falling apart,'" which are inherent in printing plates made of gelatin. Appellant's Br. 8.

It is undisputed that claim 31, reproduced below, is representative.

> A printing method using a non-gelatin, viscoelastic gel printing plate, comprising the steps of:
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> applying a layer of paint to a non-gelatin, viscoelastic gel printing plate comprising a viscoelastic gel composition having a viscoelastic polymer selected from the group consisting of a hydrogenated poly-isoprene/butadiene polymer, poly(styrene-butadiene-styrene), poly(styrene-butadiene)$_{n}$, poly(styrene-iso-prene-styrene), poly-(styrene-isoprene)$_{n}$, poly(styrene-ethylene-propylene), poly(styrene-ethylene-propylene-styrene)$_{n}$, poly(styrene-ethylene-butylene-styrene)$_{n}$, poly(styrene-ethylene-butylene), poly(styrene-ethylene-propylene)$_{n}$, poly(styrene-ethylene-butylene)$_{n}$, polystyrene, polybutylene, poly(ethylene-propylene), poly(ethylene-butylene), polypropylene, polyethylene, polyurethane, polyethylene and silicone, and

> a combination thereof, and a plasticizing oil, said viscoelastic gel composition excludes gelatin and has a smooth surface formed as a sheet and shaped for use as said non-gelatin, viscoelastic gel printing plate;
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> laying over said non-gelatin, viscoelastic gel printing plate a surface onto which said layer of paint for creating a print is to be transferred; and,
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> transferring at least a portion of said layer of paint from said non-gelatin, viscoelastic gel printing plate to said surface via pressure for producing said print,
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> said method for producing said print using said non-gelatin printing plate being capable of being performed either with a pressure tool, without said pressure tool and solely with the pressure being applied by a hand of a person, or with both said pressure tool and the pressure being applied by the hand of a person.

J.A. 34–35. Claim 39, the other independent claim on appeal, further recites limitations requiring the production of a second print. J.A. 4, 36–37. The examiner rejected claims 31–50 as obvious over at least one of five combinations of prior art references. Kross appealed to the Board, which affirmed the examiner's rejections.

In its decision affirming the examiner's rejections, the Board noted that this was the third time it was reviewing "similar claims" based on the '400 Application. J.A. 2. It rejected Kross's argument that the purported invention represents a new use for a known material and meets a long-felt and unmet need of solving the cracking problems that were a hallmark of gelatin plates. J.A. 6. The Board concluded that a person of skill in the art "would have expected . . . that the properties of the viscoelastic gel compositions" described in the prior art "would likely address the

[same] problems." J.A. 6–7. The Board found that the examiner's rejections were consistent with prior findings of fact and conclusions of obviousness addressing Kross's now-cancelled, similar claims for the '400 Application. J.A. 6.[1] For example, the Board had previously found that the prior art recognized the splitting and cracking problem with gelatin, and that this would have prompted a person of skill in the art "to consider materials having similar properties, but less prone to splitting," such as the viscoelastic materials claimed by Kross. J.A. 271. Accordingly, the Board credited the examiner's findings, noting that a person of skill in the art would have a "reasonable expectation of successfully solving a known problem using known properties of a known material." J.A. 7 (citing *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991). The Board also rejected Kross's arguments directed to objective indicia of non-obviousness. J.A. 7–9.

On appeal, Kross challenges the Board's conclusions with respect to one prior art reference combination: Singular Impressions,[2] Taylor,[3] and Chen.[4] Singular Impressions discloses monotype printing using a glass or metal printing plate, but not a gel printing plate. J.A. 587. It teaches that "[i]n its purest and simplest form, a monotype

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[1] The Board noted that Kross's previously rejected claims differed from his current claims only in their inclusion of a washing step and requirements of reusing the plates and application of pressure by hand. J.A. 4.

[2] Printout of Singular Impressions, the monotype process, http://americanart.si.edu/exhibitions/online/monotypes/video.html. as captured by the WaybackMachine on April 14, 2009.

[3] Printout of http://marytaylorart.com/FAQ/FAQGelatinPrint.htm as captured by WaybackMachine on October 19, 2009.

[4] U.S. Patent No. 7,159,259.

is made by drawing with printer's ink or oil paint on a smooth surface such as glass or a metal plate." *Id.* It also teaches that the image can be transferred to paper using hand pressure. *Id.* By contrast, Taylor discloses how to prepare gelatin printing plates for use in monotype printing. J.A. 588. Chen, on the other hand, discloses non-gelatin, gel polymers, primarily for use in medical devices. J.A. 599. The parties agree that Chen does not disclose the use of these materials in the context of printing. The parties also agree that a fourth prior art reference, Germain,[5] discloses the problems with using gelatin printing plates. J.A. 177–182; J.A. 306–312.

Kross timely filed a notice of appeal. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4).

DISCUSSION

"We review Board decisions in accordance with the Administrative Procedure Act, 5 U.S.C. § 706(2)." *HTC Corp. v. Cellular Comm'ns Equip., LLC*, 877 F.3d 1361, 1367 (Fed. Cir. 2017). Under the APA, "we review the Board's legal conclusions de novo and its factual findings for substantial evidence." *Id.* "Substantial evidence . . . means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938). Obviousness is a question of law based on underlying factual findings. *Merck Sharp & Dohme Corp. v. Hospira, Inc.*, 874 F.3d 724, 728 (Fed. Cir. 2017). In an obviousness analysis, factual findings include, *inter alia*, the scope and content of the prior art, level of ordinary skill in the art, the differences between the claimed invention and the prior art, and motivation to combine. *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362

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[5] Finda Germain, Gelatin Printmaking-Monotype Prints, https://youtube.com/DyOJG-TEWf8, YouTube video and comments dated May 11, 2008.

(Fed. Cir. 2013) (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007)).

On appeal, Kross challenges the Board's obviousness determination for a host of reasons. Kross's main argument is that, contrary to the Board's finding, there was no motivation to combine the prior art references. Appellant's Br. 19–24. Kross further argues that the Board's obviousness determination is erroneous because it employs an impermissible "obvious to try" reasoning. *Id.* at 24–29. Kross also appears to argue that the Board failed to give proper weight to his evidence of objective indicia of non-obviousness—specifically, that the purported invention solves a long felt but unmet need. *Id.* at 19–21; Appellant's Reply Br. 9–11. We are not convinced.

As the Board explained, a person of ordinary skill in the art would have been motivated to address the known cracking and splitting problems with gelatin printing plates using the materials identified in Chen. J.A. 5–6 (citing J.A. 271).[6] The Board cited the examiner's findings that a person of skill in the art would have recognized the problems associated with Taylor's gelatin printing plates and then turned to Chen in looking for an alternative polymer to use in its gel printing plates. J.A. 6 (citing J.A. 491–98); J.A. 556. Chen, with its focus on viscoelastic gels that are crack- and tear-resistant, provides that alternative. *See* J.A. 590. It discloses "a viscoelastic gel meeting the claimed limitations . . . which has high dimensional stability, crack and tear resistance and long service life and capable of repeated handling." J.A. 271.[7] Substantial

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[6] Kross does not dispute that both Taylor and Germain identified the drawbacks of working with gelatin printing plates. Appellant's Br. 28.

[7] Although this discussion refers to Kross's now-cancelled claims, we agree with the Board that these findings

evidence thus supports the Board's finding of a motivation to combine Chen's viscoelastic materials with Taylor's gel printing plates to address the known problems with gelatin printing plates.

Contrary to Kross's arguments, the fact that Chen does not teach the use of viscoelastic compositions in any type of printing does not undermine the Board's finding of a motivation to combine. *See* Appellant's Br. 13–14; Appellant's Reply Br. 1–2. We agree with the Board that Chen's silence "as to a particular application is of little or no moment given the teachings of the properties and the resulting general uses of the viscoelastic gel-like materials, which would have suggested those materials as, more likely than not, a successful solution to the problems of gelatin cracking and splitting." J.A. 271.

We likewise reject Kross's argument that the Board impermissibly employed an "obvious to try" rationale. Kross's arguments in this regard focus on the Board's statement that the "reasonable expectation of successfully solving a known problem using known properties of a known material i[s] generally prima facie obvious." J.A. 6–7. We do not read into this statement the error that Kross complains of. This is not a case, as Kross contends, where "the prior art gave no indication of critical parameters and no direction as to which of many possibilities is likely to be successful." Appellant's Br. 24–25 (quoting *In re Copaxone Consol. Cases*, 906 F.3d 1013, 1025 (Fed. Cir. 2018)). As Kross himself contends, Taylor and Germain identified the parameters that would have been of concern to a skilled artisan (cracking, splitting). Chen teaches that non-gelatin, gel polymers would be beneficial in fixing these critical parameters (high dimensional stability, crack and tear resistance). That is a far cry from impermissibly requiring

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apply to the identical limitations in the claims at issue in this appeal.

that a skilled artisan, without any guidance from the prior art, "vary all parameters" until one succeeds. *Kubin*, 561 F.3d at 1359.

Accordingly, we *affirm* the Board's conclusion of obviousness.

CONCLUSION

We have considered Kross's remaining arguments and find them unpersuasive. For the foregoing reasons, we *affirm* the decision of the Board.

AFFIRMED

COSTS

No costs.