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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RICHARD GRAMM
Appellant, Patent Owner

Appeal 2018-006732
Reexamination Control 90/013,868
Patent No. US 6,202,395 B1¹
Technology Center 3900

Before DANIEL S. SONG, BRETT C. MARTIN, and
BART A. GERSTENBLITH, *Administrative Patent Judges*.

SONG, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Issued March 20, 2001 (hereinafter “the ’395 patent”). The Patent Owner identifies “Richard Gramm” and “Gramm’s exclusive licensee, Headsight, Inc.” as the real parties in interest (Appeal Brief (hereinafter “App. Br.”) 2).

Claims 12–26 are subject to reexamination (App. Br. 2). The Patent Owner appeals under 35 U.S.C. §§ 134(b) and 306 from a Final Rejection of claims 12–26. We have jurisdiction under 35 U.S.C. §§ 134(b) and 306.

The invention is directed to a combine header height control apparatus (Title). The sole independent claim on appeal reads:

12. Apparatus for maintaining a non-cut crop header in a crop harvester a designated height above the soil as the crop harvester traverses a field, said apparatus comprising:

a generally linear arm coupled to the header and having first and second opposed ends, wherein the first end of said arm engages and is displaced over the soil as the header moves above the soil;

angular deflection sensing means coupled to the second end of said arm for measuring a deflection of said arm when the first end of said arm encounters irregularities in the soil as the header moves above the soil and for providing a first signal representing the extent of deflection of said arm;

biasing means for urging said arm to a selected inclined orientation relative to vertical, wherein said arm in said selected inclined orientation extends below and aft of said angular deflection sensing means as the crop harvester moves in a forward direction, said biasing means allowing for forward displacement of the first end of said arm beyond vertical when the crop harvester is moved rearwardly while the first end of said arm engages the soil without damaging said arm, with said biasing means again urging said arm [sic, arm] to said selected inclined orientation when the crop harvester is again moved in the forward direction or when the second end of said arm is removed from contact with the soil; and

control means coupled to said header and said angular deflection sensing means and responsive to said first signal for raising or lowering the header in accordance with said first signal in maintaining the header a designated height above the soil, wherein said flexible arm and angular deflection sensing

means are attached to a head housing disposed on a forward portion of said combine and said head housing is comprised of polyurethane and includes a metal tip and a mounting bracket for attaching said metal tip to a forward end of said head housing, and wherein said mounting bracket further couples said flexible arm to a forward end of said head housing.

(App. Br., Claims App'x, emphasis added).

The Examiner rejects various claims under 35 U.S.C. § 103(a) as follows:

1. Claims 12–20, 23, 25, and 26 unpatentable over Chmielewski et al.,² Lofquist et al.,³ Cleveland,⁴ and Pearson⁵ (Final Office Action (hereinafter (“Final Act.”) 4).
2. Claims 21 and 22 unpatentable over Chmielewski, Lofquist, Cleveland, Pearson, and Agness et al.⁶ (*Id.* at 6).
3. Claim 24 unpatentable over Chmielewski, Lofquist, Cleveland, Pearson, and McMurtry et al.⁷ (*Id.* at 7).

We REVERSE.

² U.S. Patent No. 5,535,577, issued July 16, 1996 (hereinafter “Chmielewski”).

³ U.S. Patent No. 5,761,893, issued June 9, 1998 (hereinafter “Lofquist”).

⁴ U.S. Patent No. 3,611,286, issued Oct. 5, 1971.

⁵ U.S. Patent No. 4,723,608, issued Feb. 9, 1988.

⁶ U.S. Patent No. 3,851,451, issued Dec. 3, 1974 (hereinafter “Agness”).

⁷ U.S. Patent No. 5,189,806, issued Mar. 2, 1993 (hereinafter “McMurtry”).

BACKGROUND

Claims 1–11 and 27–34 of the '395 patent were found to be unpatentable by the Board in prior *Inter Partes* Review Nos. IPR2015-00898 and IPR2015-00899, the Federal Circuit having affirmed the Board's conclusions of obviousness with respect to these claims in *Gramm v. Deere & Co.*, 711 Fed. Appx. 650 (Fed. Cir. 2018, R. 36) (*see also* App. Br. 1).

In IPR2015-00899, most of the claims of the '395 patent, including independent claims 1 and 27, were found unpatentable based on the combination of Lofquist, Chmielewski, and Cleveland (IPR2015-00899 Final Written Decision 48–49). In the most pertinent part, the IPR2015-00899 Final Written Decision states:

one of ordinary skill in the art would have been prompted to replace each of Chmielewski's contact sensors with Cleveland's sensor arm (1) as it was known to be a simple substitution of one known element for another, and (2) to achieve the predictable result of improved flexibility provided by Cleveland's sensor arm, the benefits of which permit traversing foreign objects without breaking or being damaged.

(*Id.* at 49).

In IPR2015-00899, the Board declined to institute review of claims 12–26 presently reexamined, based on the above noted combination of prior art references, and optionally Dougherty,⁸ finding that the Petitioner had not established a reasonable likelihood of prevailing as to these claims because it failed to explain how a person of ordinary skill in the art would implement the combination based on “design choice,” and failed to explain

⁸ U.S. Patent No. 4,211,057 Dougherty et al., issued July 8, 1980 (hereinafter “Dougherty”).

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elements that are being substituted (IPR2015-00899 Decision Institution 9, 25–27).

In both IPR2015-00898 and IPR2015-00899, the Petitioner was Deere & Company, the Requester in the present reexamination (Request for *Ex Parte* Reexamination 3, 68). Accordingly, this is the third post-grant proceeding regarding these claims of the '395 patent that Deere & Company has requested before the Patent Office.

PRINCIPLES OF LAW

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.

KSR Int'l v. Teleflex Inc., 550 U.S. 398, 418–19 (2007).

The Court also noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[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”). The Court further warned that the “factfinder should be aware . . . of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *Id.* at 421.

ANALYSIS

Rejection 1

With respect to independent claim 12, which is the sole independent claim on appeal, the Examiner finds that Chmielewski discloses a crop header, an angular deflection sensor means, and control/calibration, while Lofquist discloses a non-cut crop header having a head housing, a metal tip, and a mounting bracket (Final Act. 4). The Examiner concludes that it would have been obvious to one of ordinary skill in the art to combine Lofquist and Chmielewski “in order to allow for automated header height adjustment of the combine/harvester.” (*Id.*).

The Examiner further finds that “Cleveland shows an arm 24 having first and second ends seen in Figure 2,” and concludes that “it would have been obvious to one of ordinary skill in the art to provide Cleveland’s sensor arm with the devices of Lofquist et al. and Chmielewski et al. in order to ‘*permit traversing foreign objects without breaking or being damaged*’ . (See page 20 of the Request).” (Final Act. 4 (emphasis added); *see also* Ans. 4). The Examiner also finds that Pearson shows a biasing means 98 urging shank 34,” and further concludes that “[i]t would have been obvious to one of ordinary skill in the art to provide the biasing means of Pearson on the device of Lofquist et al., Chmielewski et al. and Cleveland *to prevent the arm from being damaged when moved rearward as discussed in the Pearson disclosure.*” (*Id.* at 4–5 (emphasis added); *see also* Ans. 4). The Examiner also notes that “[t]hese rejections mirror the PTAB IPR2015-00899 rejections adding the Pearson reference.” (*Id.* at 4; *see also* Ans. 4).

The Patent Owner disagrees and argues that the Examiner has not articulated a rational reason for incorporating the biasing spring structure of Pearson to the device resulting from the combination of Lofquist, Chmielewski, and Cleveland because “Cleveland already provides the functionality of bending in any direction to prevent the arm from being damaged.” (App. Br. 6, 8–9). In particular, the Patent Owner points out that:

because Cleveland specifically states that “spring [38] *must be completely flexible so that it will bend in any direction ...*” and which “*must be able to return to its original shape even after being stressed and deflected for long periods of time*” (Cleveland at 5:9–12; 5: 14–16) (emphasis added)), there is no motivation to add Pearson to the combination “to prevent the arm from being damaged when moved rearward” when the “completely flexible” spring 38 of Cleveland already provides that feature or functionality in a different fashion without being a biasing means.

(*Id.* at 8).

In that regard, the Patent Owner further argues that:

the Cleveland spring 38 (without the biasing means) necessarily bends beyond vertical if the combine harvester reverses and the Cleveland spring 38 will necessarily return to its original shape . . . Therefore, the Office’s asserted motivation as to *why* a person of ordinary skill would add Pearson (i.e., “to prevent the arm from being damaged when moved rearward.”) is . . . without merit.

(*Id.* at 15).

Thus, according to the Patent Owner, “the Office does not provide any explanation as to *how* one could bias or *why* one would bias a ‘completely flexible’ spring with another spring.” (*Id.* at 14). Accordingly, the Patent

Owner argues that the rejection utilizes improper hindsight (*Id.* at 6; *see also* Reply Br. 11).

We generally agree with the Patent Owner for the reasons argued. The Examiner’s articulated rationale for combining the biasing spring structure of Pearson to the device resulting from the combination of Lofquist, Chmielewski, and Cleveland is inadequate because “it is unnecessary or superfluous to bias the Cleveland spring to achieve the articulated motivation asserted by the Office.” (Reply Br. 13).

The Examiner explains that “the fact that both [Cleveland and Pearson] are employed to for [sic] the same purpose would, in the examiner’s view, make for a stronger rejection, not one based on impermissible hindsight.” (Ans. 7). While disclosure of structures for the same purpose may suggest interchangeability of such structures, we do not find it adequate for providing a reason to include both structures in the same device. While there may be other rational reasons for providing the biasing spring structure of Pearson in the device resulting from the combination of Lofquist, Chmielewski, and Cleveland, the Examiner has not provide such a reason with rational underpinnings to sufficiently support the rejection. *KSR*, 550 U.S. at 418.

The Examiner further explains that Pearson provides “explicit reasons for employing the biasing means.” (Ans. 8). Indeed, Pearson discloses that its biasing spring structure prevents “breakage” of a skid when the agricultural implement is moved in a reverse direction (*see* Pearson, col. 1, ll. 51–53; col. 2, ll. 31–37; col. 6, ll. 2–9). However, this explicit reason set

forth in Pearson in the context of the rejection that relies on the spring of Cleveland as the arm, is insufficient for the reasons discussed *supra*.

The Examiner sows confusion by stating that “[t]he examiner does not concur that the teaching of Pearson would be to have the Pearson spring bias the Cleveland spring and appellant provides no evidence to support such a conclusion.” (Ans. 8). If the Pearson biasing spring is not being utilized to bias the spring of Cleveland that corresponds to the recited arm of claim 12, it is unclear from the record how the disclosures of Cleveland and Pearson are being applied in the rejection. In that regard, the Examiner further alleges, albeit with respect to claim 13, that “[a]s the examiner has not discussed *nor employed the spring structure of Cleveland in the above rejection*, that argument is not germane.” (Ans. 9 (emphasis added)).

However, this explanation by the Examiner is entirely inconsistent with the record as noted above in which the Examiner concluded that “it would have been obvious to one of ordinary skill in the art to provide Cleveland’s sensor arm with the devices of Lofquist et al. and Chmielewski et al. in order to ‘permit traversing foreign objects without breaking or being damaged’.” (Final Act. 4 (emphasis added); *see also* Ans. 4). This explanation is also entirely inconsistent with the Examiner’s statement “[t]hese rejections mirror the PTAB IPR2015-00899 rejections adding the Pearson reference” (*id.*; *see also* Ans. 4) because the prior IPR proceeding clearly utilized the arm of Cleveland as the above-reproduced portion of the Final Written Decision makes explicitly clear (IPR2015-00899 Final Written Decision 49). As such, the Patent Owner is correct that the related IPR and

the present reexamination relied on the spring sensor arm of Cleveland (Reply Br. 8–10).

The Examiner further states that because in claim 12, “there is an open modifier, i.e. ‘comprising’, there can be additional structure present in the device.” (Ans. 8). While the use of the transition term “comprising” in claim 12 does allow for additional structure, that does not address the fact that there must be an articulated reason with rational underpinnings to support provision of additional structure.

Hence, for the reasons discussed *supra*, we agree with the Patent Owner that the Examiner has not articulated an adequate reason with rational underpinnings for incorporating the biasing spring structure of Pearson to the device resulting from the combination of Lofquist, Chmielewski, and Cleveland. Instead, the suggested combination appears to be based on impermissible hindsight. *KSR*, 550 U.S. at 418–19, 421. Thus, we reverse the Examiner’s rejection of claim 12.

The Patent Owner, *inter alia*, relies on dependency on claim 12 for patentability of claims 13–20, 23, 25, and 26 (App. Br. 9). Accordingly, we also reverse the Examiner’s rejection of these claims. The Patent Owner’s arguments directed specifically to dependent claims 13, 14, and 16 (*id.* at 18–20) are moot. The Patent Owner’s further argument based on an asserted lack of expectation of success is also moot (*id.* at 16–18; *see also* Reply Br. 22). The Patent Owner’s unpersuasive assertion that there is no motivation to combine Cleveland with Chmielewski and Lofquist (*id.* at 22–28) has already been decided in view of the Federal Circuit’s affirmance of

the Board's decision in IPR2015-00899, which relied on the same combination of references.

The Patent Owner's arguments based on estoppel (App. Br. 28–29) and the Supreme Court's decision in *SAS Institute v. Iancu* (Reply Br. 3 (citing *SAS Institute v. Iancu*, 138 S. Ct. 1348 (2018))), appear to be matters to be raised on petition to the Director, and do not appear to be issues properly reviewable by the Board in this reexamination proceeding. Nonetheless, such issues are moot.

Rejection 2

Claims 21 and 22 stand rejected as unpatentable over Chmielewski, Lofquist, Cleveland, Pearson, and Agness, the Examiner further relying on Agness for disclosing the recited guard means being a curved bar (Final Act. 6). As the Patent Owner points out, the Examiner's application of Agness relative to these claims does not overcome the deficiency of the rejection relative to claim 12 from which claims 21 and 22 ultimately depend (App. Br. 21). Thus, this rejection is also reversed.

Rejection 3

Claim 24 stands rejected as unpatentable over Chmielewski, Lofquist, Cleveland, Pearson, and McMurtry, the Examiner further relying on McMurtry for disclosing the recited adjustable mounting arrangement (Final Act. 6). Again, as the Patent Owner points out, the Examiner's application of McMurtry relative to claim 24 does not overcome the deficiency of the

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rejection relative to claim 12 from which claim 24 ultimately depends (App. Br. 21). Thus, this rejection is also reversed.

CONCLUSION

The Examiner's rejections are REVERSED.

REVERSED