

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EMMANUEL LEGRAND

Appeal No. 2002-0794
Application 09/037,584

HEARD: March 20, 2003

Before WARREN, WALTZ and DELMENDO, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing views of the examiner, in the answer, and appellant, in the brief and reply brief, and based on our review, find that we cannot sustain the rejection of appealed claims 11 through 13 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Boland in view of Young, Sr., et al. (Young), and the rejection of appealed claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Boland in view of Young as applied to appealed claims 11 through 13 and 15 above, and further in view of Harbeke et al. (Harbeke).^{1,2}

¹ Appealed claims 11 through 15 are all of the claims in the application. See the amendment of April 10, 2000 (Paper No. 11) and of November 29, 2002 (Paper No. 17).

² Answer, pages 4-5.

In order to establish a *prima facie* case of obviousness, the examiner must show that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in this art would have led that person to the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellant's disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Fritch*, 972 F.2d 1260, 1265-66, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); *In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988); *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531-32 (Fed. Cir. 1988). The requirement for objective factual underpinnings for a rejection under § 103(a) extends to the determination of whether the references can be combined. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002), and cases cited therein.

As appellant points out (e.g., brief, pages 2, 4 and 5), when considered in light of the written description in the specification as interpreted by one of ordinary skill in this art, *see, e.g., In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997), the plain language of appealed claim 11, and appealed claims dependent therein, requires that the claimed cutting line comprises at least “a layer of adhesive . . . bonded all over” the monofilament core, thus securing a granular coating “entirely covering an outer surface of” the core. Appellant contends that the applied prior art would not have suggested to one of ordinary skill in this art a cutting line having a granular coating “which completely covers the” monofilament core as required for the claimed “cutting line for a rotary head brush cutter and edge trimmer” encompassed by the appealed claims (brief, pages 4 and 5).

We find that Boland discloses a “composite cutting line [that] includes a nylon blend carrier which is *impregnated* from 1%-30% (preferably 6%-15%) with an inorganic grit material” which “provides a superior balance between line integrity and cutting ability” (col. 1, lines 60-62, and col. 3, lines 64-66; emphasis supplied). Thus, one of ordinary skill in this art would have found it apparent from this disclosure and from Boland FIG. 1 that the “grit material”

is not carried on the surface of the monofilament core and does not entirely cover an outer surface of the core as required by the appealed claims.³ The reference further teaches that “[h]igher concentrations of grit improves cutting ability but decreases line integrity” (col. 3, lines 66-67).

The examiner recognizes that the cutting line of Boland is limited by line integrity and relies on Young, in particular, col. 16, lines 20-35, to show that a fiber can be continuously coated by an adhesive which is then covered by abrasive particles to continuously coat “the entire outer surface . . . to maximize coating properties such as abrasion” (answer, pages 4-5). The examiner further takes the position “that using particles joined by a binder to the surface of Boland would not destroy the function of Boland” (answer, page 7).

On this record, we must agree with appellant. It is well settled that the examiner must point to some teaching, suggestion or motivation in the prior art to support the combination of references. *See Lee, supra; Smith Industries medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420-21 (Fed. Cir. 1999); *In re Mayne*, 1043 F.3d 1339, 1342, 41 USPQ2d 1451, 1454 (Fed. Cir. 1997); *Fritch*, 972 F.2d at 1266, 23 USPQ2d at 1783; *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 9292, 933 (Fed. Cir. 1984); *In re Keller*, 642 F.2d 413, 425-26, 208 USPQ 871, 881-82 (CCPA 1981); *see also Dow Chem.*, 837 F.2d at 473, 5 USPQ2d at 1531 (“The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that [the claimed process] should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. [Citations omitted] Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant’s disclosure.”).

While we agree with the examiner that Young would have reasonably suggested to one of ordinary skill in the art that a fiber entirely coated with abrasive particles through an adhesive would be more abrasive than a fiber which contains a lower concentration of such particles, the examiner has not established with evidence that this person would have reasonably substituted a

³ It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, *see generally, Fritch*, 972 F. at 1264-65, 23 USPQ2d at 1782-83, presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

monofilament entirely *coated* with abrasive particles as the cutting line in place of the monofilament cutting line of Boland in which a lower concentration of abrasive particles are *embedded* in the line with a reasonable expectation of avoiding the problem of cutting line integrity with higher concentrations of abrasive particles taught by Boland. Indeed, on this record, we find that Boland would have discouraged any expectation that the problem of line integrity with higher concentration of abrasive particles can be avoided by using a monofilament line entirely coated with abrasive particles.⁴

Thus, we conclude that on this record, the examiner has *not* established that, *prima facie*, one of ordinary skill in this art would have combined teachings of Boland and Young to arrive at the claimed cutting line encompassed by the appealed claims, and that with respect to appealed claim 14, Harbeke does not add the necessary evidence to support a *prima facie* case because, as appellant points out, this reference does not disclose a cutting line that contains abrasive particles.

Accordingly, we reverse both grounds of rejection.

The examiner's decision is reversed.

Reversed

⁴ See *In re Gurley*, 27 F.3d 551, 552-53, 31 USPQ2d 1130, 1131-32 (Fed. Cir. 1994) (“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. [Citations omitted.]”).

CHARLES F. WARREN
Administrative Patent Judge

THOMAS A. WALTZ
Administrative Patent Judge

ROMULO H. DELMENDO
Administrative Patent Judge

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