

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT J. MILLER

Appeal 2008-2026
Application 10/423,881
Technology Center 1700

Decided: May 27, 2008

Before EDWARD C. KIMLIN, CHARLES F. WARREN, and
CATHERINE Q. TIMM, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1-6 and 11-15. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

I. BACKGROUND

The invention relates to a tile structure, such as floor tile, that includes a generally planar substrate utilizing interlocking members, such as tongue and groove members, for installation convenience. The tile structure includes a veneer layer of glass, ceramic, marble, granite, natural stone, slate, etc. attached to the generally planar substrate via, preferably, a water impervious adhesive. The veneer layer has a Mohs hardness greater than 3 and a thickness of between 2 and 10 mm. Claims 1 and 11 are illustrative of the subject matter on appeal:

1. An engineered tile, comprising:
 - a generally planar base of selected dimensions and configuration, said base including an upper surface, a lower surface, a first edge incorporating a first cooperating element of an interlocking member, and a second edge incorporating a second cooperating element of said interlocking member. [sic]
a veneer layer having a Mohs hardness of greater than 3 and a thickness of between 2 and 8mm [sic] affixed to said upper surface of said base, said veneer layer being dimensioned so as not to overlie said first cooperating member.
11. A flooring tile, comprising:
 - A stable, substantially rigid, generally planar substructure sheet having a thickness of between 4 and 10 mm and defining an upper and lower surface of a select geometric configuration, said sheet defining at least a first and second edges [sic] where the first edge features a profiled tongue structure projecting therefrom in a plane generally parallel to the upper core surface and said second edge including a groove recess corresponding in shape and dimension to the profiled tongue of the first edge, where inserting said tongue structure of said first edge into the groove structure of said second edge interconnects abutting tiles;
a veneer layer affixed to said upper surface of said sheet, said veneer layer being composed of material selected from the

group consisting of sliceable natural stone, marble, granite, slate, glass, and ceramics, where said veneer has a thickness of 3-10 mm and possesses a Mohs hardness of at least 3.

Appellant requests review of the sole rejection maintained by the Examiner, namely the rejection of claims 1-6 and 11-15 as obvious under 35 U.S.C. § 103(a) over U.S. Patent No. 6,517,915, issued February 11, 2003, to Banus et al. (“Banus”) in view of U.S. Patent No. 6,803,110, issued October 12, 2004, to Drees et al. (“Drees”).

II. DISCUSSION

The Examiner finds that “Banus discloses a decorative composite stone material having a Mohs index of at least 7, which is coated with a ceramic material (veneer) (column 5, lines 1-15) where the stone flooring tile is made using marble (column 5, lines 40-41, 60-62 and column 6, line 1).” (Ans. 3). The Examiner states that “Figures one through three show a coating on a generally planar base or substructure.” (Ans. 5). However, the Examiner finds that Banus does not teach a first edge incorporating a first cooperating element of an interlocking member and a second edge incorporating a second cooperating element of an interlocking member. (Ans. 4). The Examiner concludes that “[i]t would have been obvious to one of ordinary skill in the art to include tongue and groove edges [taught by Drees] in the floor tile of Banus to improve or simplify the installation of the floor.” (Ans. 4-5).

Appellant responds that the Examiner incorrectly read the teachings of Banus and that “the coating of Banus is not affixed to the upper surface of a generally planar base or substructure as claimed”, nor does the particle coating of Banus “even form a veneer layer affixed to the surface of the

composite stone material itself.” (App. Br. 4). Appellant also responds that “there is no teaching or suggestion that would motivate one of ordinary skill in the art to provide a coating having the specific veneer thickness recited in the instant claims.” (App. Br. 4). Appellant also argues that utilizing the tongue and groove taught by Drees on the stone composite material taught by Banus would fail to provide the claimed invention, that one of ordinary skill in the art would not be motivated to make such a modification to the composite material of Banus, and that there is no suggestion that such a modification of the composite stone material could even be made. (App. Br. 5-6).

The dispositive issue on appeal arising from the contentions of Appellant and the Examiner is: Did the Examiner reversibly err in finding that Banus teaches a veneer layer affixed to an upper surface of “a generally planar base,” as called for in claim 1, and “a generally planar substructure sheet,” as called for in claim 11? We answer this question in the affirmative.

The evidence of record supports the following Findings of Fact (FF):

1. Banus teaches a decorative composite stone material which is made up of hard aggregate particles, such as pieces of quartz, that are “coated with metal, ceramic, plastic or other material in such a way as to produce a coated particle.” (Banus, col. 5, ll. 1-13).

2. According to Banus, “[t]he coated transparent or translucent hard particles or granules are then incorporated into a composite stone material production process such as is well known to practitioners skilled in the art.” (Banus, col. 6, ll. 56-59).

3. Specifically, the Background of the Invention section of Banus discusses that “[t]he current technologies for producing composite or

agglomerated stone utilize cements, epoxy, polyester, acrylic and other modern binders to hold the aggregates together in forming the composite stone.” (Banus, col. 1, ll. 39-42).

4. Figures 1-3 illustrate “a partial cross section diagrammatic view” of a stone composite tile. (Banus, col. 5, l. 60-col. 6, l. 3).

5. Figures 1 and 2 show “bits and granules 20 of aggregate distributed uniformly within and held together as a solid by binder 30.” (Banus, col. 7, ll. 14-21). Figure 3 shows “a piece of hard aggregate selected in accordance with the limitations of the invention, granule 22, which was fully enveloped by controlled coating 24 of selected materials.” (Banus, col. 7, ll. 22-25).

The Examiner bears the initial burden, on review of prior art or on any other ground, of presenting a *prima facie* case of non-patentability. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). “On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.” *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (emphasis omitted).

Applying the preceding legal principles to the Factual Findings in the record of this appeal, we determine that the Examiner has not established a *prima facie* case of obviousness with respect to the only independent claims, claims 1 and 11. In particular, the Examiner has not adequately demonstrated that the teachings of Banus would have suggested to one of ordinary skill in the art a veneer layer affixed to an upper surface of “a generally planar base,” as called for in claim 1, or “a generally planar substructure sheet,” as called for in claim 11.

We find no teaching or suggestion in Banus that the granules 20/22 that are coated by a metal or ceramic coating 24 would be either “a generally planar base” or a “generally planar substructure sheet.” Rather, Banus clearly teaches that these granules 20 are “aggregate particles.” (FF 1-5). Figures 1-3 are cross sections of the stone composite material. (FF 4). The irregular borders of the granules 20/22 illustrated in figures 1-3 clearly do not suggest that the particles are generally planar in their structure. (FF 3 and 5). Thus, we disagree with the Examiner’s finding that figures 1-3 show a veneer layer on either “a generally planar base” or “a generally planar substructure sheet” as claimed.

III. CONCLUSION

The Examiner reversibly erred in finding that Banus teaches a veneer layer affixed to an upper surface of “a generally planar base,” as called for in claim 1, or “a generally planar substructure sheet,” as called for in claim 11. Accordingly, we cannot sustain the Examiner’s rejection. Because our determination on this issue necessitates a reversal, we need not address Appellant’s arguments directed to the combination of the teachings of Banus and Drees.

Claims 2-5 and 12-15 are all dependent from claims 1 and 11, respectively, and the rejection of these claims fails for the reasons provided above.

Accordingly, we do not sustain the rejection of all the claims.

IV. DECISION

We reverse the Examiner’s decision.

REVERSED

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