

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* AMY B. STREETON and WILLIAM O. BURKE

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Appeal 2008-1499  
Application 10/639,386  
Technology Center 1700

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Decided: March 31, 2008

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Before CHUNG K. PAK, JEFFREY T. SMITH, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's refusal to allow claims 1, 3 through 15, and 33 through 35, all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 6.

*STATEMENT OF THE CASE*

The subject matter on appeal is directed to “slip resistant mats” (Spec. 1). Further details of the appealed subject matter are recited in representative claim 1 reproduced below:

1. A mat consisting essentially of:

a base layer having a planar top surface to which is bonded a top layer, a bottom surface and a depth E wherein said bottom surface includes a plurality of identically sized and shaped circular depressions, wherein each depression of said plurality of depressions is characterized as having a uniform depth D surrounded by straight side walls and wherein said depth D is less than said depth E of said base layer, said plurality of depressions providing a suction force when at least a portion of air is expressed from within said plurality of depressions and said mat is engaging a surface.

The Examiner has relied upon the following references as evidence of unpatentability of the claimed subject matter:

Roberts	2,776,233	Jan. 1, 1957
Malpass	WO 02/43535 A2	Jun. 6, 2002

The Examiner has rejected the claims on appeal as follows:

- 1) Claims 1, 3 through 15, and 33 through 35 under 35 U.S.C. § 103(a) as unpatentable over the disclosure of Malpass; and
- 2) Claims 1, 3 through 15, and 33 through 35 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Roberts and Malpass.

The Appellants assert that the Examiner’s rejections are untenable. The Appellants contend that Malpass alone, in combination with Roberts,

would not have suggested a mat consisting essentially of a bottom surface having a plurality of identically sized and shaped circular depressions as required by claim 1 (App. Br. 5-11). The Appellants also contend that Malpass alone, or in combination with Roberts, would not have suggested “the specific thickness, spacing, shape and depth of the recesses as recited in the dependent claims” (App. Br. 5 and 9). Further, the Appellants contend that Malpass alone, or in combination with Roberts, would not have suggested a rubber base layer having the hardness recited in claim 6 (App. Br. 5 and 10). The Examiner disagrees with the Appellants’ contentions (Ans. 4-8). Consequently, the Appellants appeal from the Examiner’s decision rejecting the claims on appeal under 35 U.S.C. § 103(a).

*RELEVANT FACTUAL FINDINGS, PRINCIPLES OF LAW, ISSUES AND ANALYSES*

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “[A]nalysis [of whether the subject matter of a claim would have been obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co., v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41 (2007) quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); see also *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464

F.3d 1356, 1361 (Fed. Cir. 2006) (“The motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself.”); *In re Bozek*, 416 F.2d 1385, 1390 (CCPA 1969) (“Having established that this knowledge was in the art, the examiner could then properly rely, as put forth by the solicitor, on a conclusion of obviousness ‘from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.’”); *In re Hoeschele*, 406 F.2d 1403, 1406-407 (CCPA 1969) (“[I]t is proper to take into account not only specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.”).

There is no dispute that Malpass, like the Appellants, describes a slip resistant floor mat for a smooth floor composed of a plurality of recessions in the bottom surface of at least one bottom layer attached to a top layer. (*See* Figures 3 and 4, together with Abstract, and pages 3-5). Figures 3, 4 and 5 of Malpass illustrate a plurality of identically sized and shaped *large* circular recessions having a uniform depth and a plurality of identically sized and shaped *small* circular recessions having a uniform depth. (*See* page 3, ll. 10-12). The depths of these recessions are shown to be less than the thickness of the bottom layer. (*See* Malpass, Figures 3 and 4).

The dispositive question is, therefore, whether Malpass alone, or in combination with Roberts, would have suggested a bottom surface including “a plurality of identically sized and shaped circular depressions” within the

meaning of 35 U.S.C. § 103(a). On this record, we answer this question in the affirmative.

As indicated *supra*, Malpass teaches, *inter alia*, a plurality of identically sized and shaped large circular recessions in a bottom surface of its floor mat. Although Malpass also teaches a plurality of identically sized and shaped small circular recessions in the same bottom surface, we determine that the transitional phrase “consisting essentially” recited in claim 1 does not preclude the presence of the plurality of identically sized and shaped small circular holes or recessions taught in Malpass. *See In re Herz*, 537 F.2d 549, 551-52 (CCPA 1976). Both the Appellants’ and Malpass’ depressions overcome the problems associated with the use of conventional grippers, cleats, fasteners, frames and suction cups for reducing the movement of a mat on a carpeted floor and provide a mat with the slip resistant property to smooth floors. (*Compare* Malpass, pages 1-2, with Spec. 1-2). On this record, the Appellants have not demonstrated that Malpass’ additional small depressions materially affect the basic and novel characteristics of the claimed mat. *In re De Lajarte*, 337 F.2d 870, 874 (CCPA 1964) (Applicants have the burden of showing that a component in a reference would materially affect the basic and novel characteristics of a claimed composition).

Even were we to determine that the transitional phrase “consisting essentially” recited in claim 1 precludes the presence of Malpass’ additional small circular depressions, our conclusion would not be altered. We find that Malpass teaches (Malpass p. 3, ll. 10-12) that:

The existence of multiple sizes of recessions permits improved performance on a variety of floor surfaces since larger

recessions perform better on some surfaces and smaller recessions perform better on others.

Implicit in this disclosure of Malpass is that a plurality of identically sized and shaped large circular recessions alone should be used if a slip resistant floor mat is to be used for certain specific surfaces. Thus, we concur with the Examiner that one of ordinary skill in the art would have been led to employ only identically sized and shaped large circular recessions in the bottom surface of the mats of the type taught by Malpass, with a reasonable expectation of successfully improving its slip resistant property for “some surfaces”. Indeed, it is known to employ only a plurality of identically sized and shaped (square) recessions in the bottom surface of a mat to improve its slip resistance as evidenced by Roberts (Roberts, col. 1, l. 61 to col. 2, l. 8, together with Fig. 2).

As to “the specific thickness, spacing, shape and depth of the recesses” as recited in claims 10, 12 through 15, and 33 through 35, we find that Malpass teaches (Malpass p. 2, l. 28 to p. 3, l. 12) that:

The size and shape specification of the recessions can be varied and they can be positioned in a variety of arrangements. The recessions can be any shape that is formed on the underside of the mat, does not extend through the top of the mat . . . adjoins the floor in a continuous manner to permit the formation of a low pressure area or near vacuum. In one embodiment, the recessions are two sizes of cylinders or recessed circles, one with a width of 0.75 and a depth of 0.040” and the other with a width of 1” and a depth of 0.063. Also, in one embodiment, the recessions are positioned in straight rows along one axis with the recessions in each adjacent row along such axis offset along the perpendicular axis such that every row is identical along the parallel axes but shifted along the perpendicular axis . . . large

recessions perform better on some surface and smaller recessions perform better on others.

In other words, we find that Malpass teaches the claimed specific thickness, spacing, shape and depth of the recesses as result effective variables. Thus, we concur with the Examiner that it is well within the ambit of one of ordinary skill in the art to employ the optimum or workable specific thickness, spacing, shape and depth of the recesses, such as those claimed, in the bottom surface of the mat taught by Malpass and/or Roberts to impart desired slip resistant properties for given surfaces. *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980)(“[D]iscovery of an optimum value of a result effective variable ... is ordinarily within the skill of the art.”); *In re Aller*, 220 F.2d 454, 456 (CCPA 1955)(“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”).

As to claim 6, we find that Malpass teaches the effect of a compression force in creating near vacuum inside the recession being impacted against the floor to reduce movement of the mat on an intended surface (Malpass p. 2, ll.21-27 and p. 5, ll. 17-22). In other words, we determine that Malpass, like the Appellants, recognizes the hardness (compressibility) of the bottom rubber layer as having the effect on the slip resistant property of its mat. Indeed, Malpass teaches forming recessions on “a soft, low durometer rubber compound such as LD-35” (Malpass p. 3, ll. 17-20). Thus, again we concur with the Examiner that Malpass teaches either the claimed hardness and/or the claimed hardness of the bottom rubber layer as a result effective variable. *Boesch*, 617 F.2d at 276.

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In view of the forgoing, we determine that the preponderance of evidence weighs most heavily in favor obviousness within the meaning of 35 U.S.C. § 103(a).

*ORDER*

The decision of the Examiner is affirmed.

*TIME PERIOD*

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

AFFIRMED

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