

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TSUYOSHI INOUE, KENJI SANO, YOSHIKI KOBAYASHI,
KENICHI SHIBATA, KEIJI HAYASHI, MITSURU HORADA, KOMAHARU MATSUI,
YU AKAKI, TAKESHI EDA, and HIROSHI UEDA

Appeal No. 2005-2508
Application No. 09/874,314

ON BRIEF

Before KIMLIN, WALTZ, and KRATZ, Administrative Patent Judges.
WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1 and 2, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a sheet for protecting a paint film, where the sheet comprises a substrate having a rubber-based pressure-sensitive adhesive (PSA) layer formed on one side, and the PSA layer comprises a rubbery

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polymer and a specified copolymer (Brief, page 4). These specified copolymers are useful as tackifiers for the PSA (specification, page 11, ll. 10-11). Representative independent claim 1 is reproduced below:

1. A sheet for protecting a paint film, said sheet comprising a substrate and formed on one side thereof a rubber-based pressure-sensitive adhesive layer which comprises a rubbery polymer and incorporated therein at least one copolymer selected from the group consisting of styrene/hydrogenated terpene copolymer resins, and hydrogenated aliphatic/aromatic copolymer petroleum resins.

The examiner has relied on the following references as evidence of obviousness:

Dobashi et al. (Dobashi)	5,643,676	Jul. 01, 1997
Cervellati et al. (EP '585) (published European Patent Application)	0 273 585	Jul. 06, 1988

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Dobashi in view of EP '585 (Answer, page 2). Based on the totality of the record, including appellants' arguments and evidence in the Brief and Reply Brief, as well as the opposing views of the examiner in the Answer, we *affirm* the rejection on appeal essentially for those reasons stated in the Answer and the reasons set forth below.

OPINION

The examiner finds that Dobashi discloses paint masking adhesive sheets suitable for covering automobiles, with one side

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of the sheet having a rubber-based PSA composition which includes at least one species of a "broad genus" of well known tackifiers (Answer, pages 2-3). The examiner recognizes that Dobashi fails to specifically disclose the two tackifier species recited in claim 1 on appeal, although Dobashi does generically teach that the rubber-based PSA preferably contains a tackifier such as an "aliphatic, aromatic or allcyclic [sic, alicyclic] petroleum resin ... and those modified, for example, by hydrogenation." (Answer, page 3). Therefore the examiner applies EP '585 for the disclosure of a similar PSA composition to that of Dobashi with tackifiers including petroleum resins characterized as aliphatic/aromatic, and resins made by copolymerization of pure aromatic monomers with olefins (*id.*). From these findings, the examiner concludes that it would have been obvious to one of ordinary skill in the art "aware of the wide variety of tackifiers which are suitable for being incorporated into rubber based pressure sensitive adhesives" to substitute the tackifier taught by EP '585 for the closely related tackifier of the rubber-based PSA composition of Dobashi (Answer, page 4). We agree.

Appellants argue that the examiner has not set forth sufficient motivation to combine Dobashi and EP '585, nor has the

examiner established a reasonable expectation of success (Brief, pages 6, 8 and 11). Appellants further argue that the examiner has not provided any specific factual evidence to conclude that one of ordinary skill is aware that the wide variety of tackifiers are suitable for being incorporated into rubber based pressure sensitive adhesives (Reply Brief, page 4).

Appellants' arguments are not persuasive. Contrary to appellants' argument, one of ordinary skill in this art would have been well aware of appropriate tackifiers for use with rubber-based pressure-sensitive adhesives.¹ This is evidenced by both Dobashi and EP '585. Dobashi teaches that the tackifier for rubber-based PSA compositions is preferably a terpene resin or terpene-phenol resin, including hydrogenated resins (col. 4, l. 63-col. 5, l. 4). Furthermore, Dobashi teaches that tackifiers may include "aliphatic, aromatic or allcyclic [sic, alicyclic] petroleum resins" including those modified by hydrogenation (col. 9, ll. 35-44), which tackifiers generically include the claimed "hydrogenated aliphatic/aromatic copolymer petroleum resins" (see

¹We note that appellants disclose that incorporation of a tackifier is usually effective in improving adhesive strength and, in addition to the claimed copolymer, "[o]ne or more appropriate tackifiers *known for use in pressure-sensitive adhesives* may be used" (specification, page 10, last paragraph, italics added).

claim 1 on appeal). Accordingly, the claimed species of tackifier would have been suggested to one of ordinary skill in this art at the time of appellants' invention by the teachings of Dobashi alone. Additionally, EP '585 provides further evidence that the claimed tackifiers were well known in the PSA art by teaching tackifiers useful with rubber-based PSA compositions where the tackifiers include aliphatic/aromatic petroleum resins which may be hydrogenated (page 3, ll. 5-10, and page 4, l. 7).

Appellants argue that there is no disclosure of any use for the tapes produced according to EP '585, and thus there is no reason for combining this reference with Dobashi, which is directed to the field of protective automobile coatings (Brief, page 8; Reply Brief, pages 7-8).

This argument is not well taken for several reasons. First, EP '585 *does* disclose a use for its tapes (i.e., as packaging tape; see page 4, l. 54, and page 5, l. 15). Secondly, the end use taught by EP '585 is not the reason for its combination with Dobashi, but the reason or suggestion for combination rests with the field of rubber-based pressure sensitive adhesive compositions and the tackifiers used therein to improve the adhesive strength, as taught by both Dobashi and EP '585.

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Appellants argue that Dobashi "teaches away" from the use of the tackifiers taught by EP '585 because the amount of tackifiers taught by EP '585 is above the maximum amount taught by Dobashi before undesirable results occur (Brief, pages 12-13; Reply Brief, page 10).

This argument is also not persuasive. The minimum amount of tackifier taught by EP '585 (33%; see page 4, ll. 15-16) is very close to the maximum amount taught by Dobashi (30%; see col. 5, ll. 8-15). See *Titanium Metals Corp. Of America v. Banner*, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985) (Amounts that are very similar would provide an expectation of similar properties). Furthermore, EP '585 does not disclose an absolute range but teaches that the "ratio of rubber to tackifier in typical PSA formulations can vary but *usually* lies between 1:2 and 2:1 by weight" (page 4, ll. 15-16, italics added). Accordingly, we determine that the teachings of Dobashi do not "teach away" from the use of the tackifiers of EP '585 in the Dobashi composition. See *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a *prima facie* case of obviousness in view of the reference evidence. Appellants assert

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that the evidence of record rebuts any inference of *prima facie* obviousness (Brief, pages 6 and 14-16; Reply Brief, page 6). Accordingly, we begin anew and weigh the countervailing evidence for and against obviousness, determining on the totality of the record whether the preponderance of evidence weighs for or against obviousness. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Appellants argue that any possible *prima facie* case of obviousness was overcome by the evidence in the original application, supplemented with the additional Declaration of Mr. Inoue under 37 CFR § 1.132 (hereafter the Inoue Declaration)(Brief, page 14). We do not find this evidence sufficient to overcome the *prima facie* obviousness established by the reference evidence for the following reasons.

Appellants assert that Examples 1-5 demonstrate the superiority of the claimed coatings over compositions *lacking the claimed copolymer tackifiers* (Brief, page 14, referring to Comparative Examples 1-2, italics added). However, appellants have not explained how this comparison has any relevance to the rejection on appeal, as no prior art has been applied where no tackifier is present. In fact, it was well known in the art that tackifiers improve the adhesive properties of rubber-based PSA

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compositions (see appellants' specification, page 10; EP '585, page 3, ll. 5-6; and Dobashi, col. 5, ll. 4-7).

Appellants assert that the Inoue Declaration establishes that the present invention provides unexpectedly superior results relative to Dobashi in terms of the fouling property (Brief, page 16). However, to constitute an effective comparison, the examples must be commensurate in scope with the subject matter sought to be patented. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). The specific adhesive composition (PIB) and tackifier compared in Example 1 (Clearon K100; Declaration, page 2) is clearly not commensurate in scope with the broad generic terminology of claim 1 on appeal. Furthermore, Rule 132 Declarations must compare the claimed subject matter with the closest prior art to be effective. See *In re Burckel*, 592 F.2d 1175, 1179, 201 USPQ 67, 71 (CCPA 1979). The claimed subject matter compared is a specific *hydrogenated* terpene copolymer (Declaration, page 2) while the resin used from Dobashi is *not* hydrogenated (*id.*; YS RESIN PX 1150). Although Dobashi exemplifies this tackifier resin (col. 12, Table 1, *5), Dobashi also exemplifies a hydrogenated terpene tackifier (YS POLYSTER T115, a hydrogenated terpene-phenol resin tackifier; col. 21, ll. 5-6). Accordingly, we determine that the hydrogenated tackifier

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would have been the closest prior art for comparative purposes. Finally, as noted by the examiner (Answer, page 5), the "Fouling Evaluation Test" is subjective, employing only visual observation (Reply Brief, page 6) with no standards for the determination of what constitutes "fouling." Thus the results cannot be determined to be "unexpected" since there is no standard for the difference between "no fouling" and "fouling."

For the foregoing reasons and those stated in the Answer, based on the totality of the record, including due consideration of appellants' arguments and evidence, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of section 103(a). Therefore we affirm the examiner's rejection of claims 1 and 2 under 35 U.S.C. § 103(a) over Dobashi in view of EP '585.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(2004).

AFFIRMED

Edward C. Kimlin)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
Thomas A. Waltz)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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