

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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARRY J. EDGINGTON and
CHRISTOPHER M. RYAN

Appeal No. 1998-1007
Application No. 08/499,079

Before OWENS, TIMM, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 44-52. Claims 53-62, the only other remaining claims in the application, have been allowed. See the Second Advisory Action mailed on July 25, 1997 (Paper No. 20).

THE INVENTION

Claim 44 is illustrative of appellants' invention, and is reproduced below:

44. A method of **tackifying** a hot melt thermoplastic composition comprising adding an effective **tackifying** amount of a polyester material

comprising greater than 5 mole% of lactic acid having a molecular weight (M_n) less than about 30,000 grams per mole and T_g less than 110°C to the thermoplastic. [emphasis added]

THE REFERENCES

Moss (Moss)	1,849,107	March 15, 1932
British Celanese	311,657 GB	August 13, 1930

THE REJECTION

Claims 44-52 stand rejected under 35 U.S.C. § 112, paragraph 1 (enablement).

Claims 44-52 stand rejected as unpatentable under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) as obvious over Moss or British Celanese.

OPINION

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with appellants that the aforementioned rejections are not well founded. Accordingly, we reverse each of the above-mentioned rejections.

I. The Rejection under 35 U.S.C. § 112, paragraph 1

The first paragraph of 35 U.S.C. § 112, with regard to enablement, requires that the specification enable a person having ordinary skill in the art to make and use the claimed invention. Further, enablement requires that the specification teach those having ordinary skill in the art to make and use the invention without "undue

experimentation." In re Vaeck, 947 F.2d 488, 495-96, 20 USPQ2d 1438, 1444-45 (Fed. Cir. 1991). Also, it is well settled that the examiner has the burden of providing a reasonable explanation, supported by the record as a whole, why the assertions as to the scope of objective enablement set forth in the specification are in doubt, including reasons why the description of the invention in the specification would not have enabled one of ordinary skill in this art to practice the claimed invention without undue experimentation, in order to establish a *prima facie* case under the enablement requirement of the first paragraph of § 112. In re Wright, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); In re Marzocchi, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971).

The examiner states that appellants' disclosure is only enabling for subject matter in accordance to page 9, lines 11-15 of appellants' specification. The examiner interprets this part of the specification as directed to a synthetic resin restricted to the three types enumerated therein. (Office Action mailed on 5/10/96, page 4, Answer, page 4).

Appellants argue that the examiner "made no attempt to explain why or in what respect additional 'specific embodiments' would be required to enable one of ordinary skill in the art to practice the invention as claimed". (Brief, pages 6-7).

As noted above, the examiner has the burden of providing a reasonable explanation, supported by the record as a whole, why the assertions as to the scope of objective enablement set forth in the specification are in doubt, including reasons why the description of the invention in

the specification would not have enabled one of ordinary skill in this art to practice the claimed invention without undue experimentation. *Id.* Here, the examiner has not supported his conclusion by any such explanation or reasons. Hence, the examiner has not met his burden for establishing a *prima facie* case. Moreover, upon our review, we find that the text on page 3, lines 20-21 and 31-33, page 4, lines 17-24, page 8, lines 27-35, and page 9, lines 1-10 enables a person having ordinary skill in the art to make and use the claimed invention, without "undue experimentation." This text sets forth "compostable thermoplastic resins" useful in appellants' claimed invention, as well as more specific types, for example (1) a thermoplastic polyactic acid polymer resin, (2) a resin grade or high molecular weight thermoplastic polyester such as a polyester urethane, or (3) a thermoplastic PHBV polymer with the tackifying resin of appellants' invention. This text also does not limit the claimed thermoplastic only to the subject matter found on page 9, lines 11-15, as asserted by the examiner, because it provides for other types of thermoplastic resins. Moreover, as stated by appellants on page 5 of their Brief, broad terminology can be used to provide objective enablement. *In re Marzocchi*, 439 F.2d 220, 223, 169 USPQ 367, 369 (CCPA 1971).

Hence, we reverse the rejection of claims 44-52 under 35 U.S.C. § 112, paragraph 1.

II. The Rejection under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) for obviousness over Moss or British Celanese.

Appellants' claim 44 is a process claim directed to a method of **tackifying** a hot melt thermoplastic composition. [emphasis added] The method comprises adding an effective tackifying amount of a polyester material comprising greater than 5 mole% of lactic acid having a molecular weight (M_n) less than about 30,000 grams per mole and T_g less than 110°C, to a thermoplastic.

Before reaching the merits of the art rejections, we note that with regard to the anticipation rejection, to constitute anticipation of the claimed invention, the examiner's burden is to apply a single prior art reference that discloses each and every material element of the claim. In re Marshall, 578 F.2d 301, 304, 198 USPQ 344, 346 (CCPA 1978). With regard to the obviousness rejection, the examiner bears the initial burden of factually supporting a *prima facie* conclusion of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

The issues are whether Moss and British Celanese each (1) discloses, or (2) teaches or suggests, a method of tackifying, involving the step of adding an effective, tackifying amount of polyester material comprising greater than 5 mole% of lactic acid having a molecular weight (M_n) less than about 30,000 grams per mole and T_g less than 110°C, to a thermoplastic.

Appellants argue that their claimed invention is directed to a method of tackifying a hot melt thermoplastic

composition, and that there is no disclosure in Moss or British Celanese regarding the use of tackifying resins. (Brief, pages 9-10).

Appellants point out that British Celanese discloses a lactic acid resin dissolved in a solvent, and the resulting solution is then added to a solution containing a cellulose derivative. Appellants also state that this patent is directed to such lacquers made with solvents. Appellants argue that Moss is also directed to the preparation of lacquers. (Brief, page 10). Appellants further argue that a lacquer by definition is different from a hot melt thermoplastic composition. (Brief, pages 10-11). Appellants conclude that their claimed invention is therefore different from the process of preparing the lacquer of Moss or British Celanese. (Brief, page 11).

In the examiner's rejection, the examiner states that Moss and British Celanese both "disclose that it is known to impart adhesion/stick to a thermoplastic . . . via the incorporation therein of a thermoplastic polylactic acid polyester resin". (Office Action mailed on 5/10/96, page 4). In the Answer, the examiner further states that each of Moss and British Celanese tackify a thermoplastic resin. (Answer, page 5). The examiner also states that British Celanese and Moss are not limited to lacquers because these references provide for the production of "plastic masses". (Answer, page 5).

We find that although Moss and British Celanese discuss "plastic masses", the examiner does not explain how such a generic disclosure anticipates, teaches, or suggests, tackifying a hot melt thermoplastic composition by adding an tackifying amount of appellants' claimed

polyester material to a thermoplastic. Also, the examiner does not explain how tackifying can occur in a solvent-based system, which is the specific embodiment disclosed in each of British Celanese and Moss.

We find that British Celanese discloses that the lactic acid resin "may be dissolved alone in any suitable solvent or mixture of solvents, and the solution thus produced may be added to a solution of cellulose derivative in the same or other solvents and plasticisers" (page 2, lines 24-29). We find that Moss discloses the same subject matter (page 2, lines 34-39). Hence, the system in each of British Celanese and Moss is solvent-based, and we find the examiner's interpretation of these references, as summarized on page 6 of this opinion, is overly broad, especially regarding his reference to "plastic masses".

On page 17 of their Brief, appellants emphasize the idea that the polyester material of British Celanese and Moss cannot act as a tackifier because of the solvent-based system. In effect, appellants explain that because the polyester material is in a liquid state due to use of a solvent, or because the polyester material is added to a cellulose derivative in a liquid state due to use of a solvent, tackifying cannot occur because the ingredients are in liquid form. We must agree with this understanding.

We note that appellants cite several cases regarding the import of process claims involving non-obvious products or new compounds. (Brief, pages 15-16). Appellants also discuss the import of the preamble of their claim 44. (Brief, pages 17-18). To address these particular arguments made by appellants, we direct attention to the

case of In re Tomlinson, 363 F.2d 928, 150 USPQ 623 (CCPA 1966).

In In re Tomlinson, the claim at issue was directed to a process of inhibiting degradation of polypropylene caused by exposure to light, comprising admixing one of a genus of compounds, including nickel dithiocarbamate, with polypropylene. **A reference taught mixing polypropylene with nickel dithiocarbamate to lower heat degradation.**

[emphasis added] The court held that the claims read on the obvious process of mixing polypropylene with the nickel dithiocarbamate and that **the preamble of the claim was merely directed to the result of mixing the two materials** [emphasis added]. "While the references do not show a specific recognition of that result, its discovery by appellants is tantamount only to finding a property in the old composition, not in the nickel compound for which, it is argued, a new use has been found". 363 F.2d at 934, 150 USPQ at 628. The court ruled the process claims unpatentable by reason of their reading on the admixture of polypropylene and nickel dithiocarbamate, an old mixture.

Applying this same analysis to the present case, we can state that the preamble of appellants' claim (tackifying a hot melt thermoplastic composition) is merely directed to the result of mixing two materials (mixing a polyester material comprising greater than 5 mole-% of lactic acid having a molecular weight (M_n) less than about 30,000 grams per mole and T_g less than 110°C with a thermoplastic). However, the instant case is distinguishable from In re Tomlinson in that it has not been shown by the examiner that the applied references can in fact achieve the result of tackifying a hot melt

thermoplastic composition, especially in light of the solvent-based systems of these references.

More specifically, in the present case, we reiterate that appellants point out that the references of British Celanese or Moss are directed to a solvent-based system, and hence, the polyester material of these references cannot tackify a hot melt thermoplastic composition since the composition is in liquid form. (Brief, page 17). That is, a liquid cannot be made tacky or sticky. Hence, appellants in effect argue that the result of tackifying a hot melt thermoplastic composition cannot in fact be achieved by British Celanese or Moss because of the solvent-based system.

As aforementioned, because the examiner has not convincingly presented a case that addresses appellants' position in this regard, by explaining why he believes tackifying a hot melt thermoplastic composition can in fact occur in British Celanese or Moss, based upon facts or technical reasoning, we find that the examiner has not met his burden for establishing a *prima facie* anticipation case or for a *prima facie* obviousness case. Hence, we must reverse the examiner's rejection of claims 44-52 as unpatentable under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) for obviousness over Moss or British Celanese.

III. Conclusion

We reverse all the rejections of record.

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

REVERSED

TERRY J. OWENS)	
Administrative Patent Judge)	
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)	
CATHERINE TIMM)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
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