

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 49

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NORMAN LIFSHUTZ, RICHARD E. GAHAN
AND GRAHAM C. STEVENS

Appeal No. 2002-0224
Application 08/628,327

ON BRIEF

Before PAK, OWENS and WALTZ, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the refusal to allow claims 23-30 as amended after final rejection. These are all of the claims remaining in the application.

THE INVENTION

The appellants' claimed invention is directed toward a filter media comprising a melt blown electret polypropylene fiber web having therein a specified additive for enhancing sustained electret filtration. Claim 23 is illustrative:

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23. A filter media comprising a melt blown electret polypropylene fiber web having a melt processable silicon-free nonionic oleophobic fluorochemical additive compound present within the web at a concentration in the range of about 0.2 to 3.5% by weight to achieve sustained electret filtration enhancement.

THE REFERENCES

Reed et al. (Reed)	4,874,399	Oct. 17, 1989
Crater et al. (Crater)	5,025,052	Jun. 18, 1991
Maruscak et al. (Maruscak)	5,038,775	Aug. 13, 1991
Murphy (Great Britain patent specification)	1,337,753	Nov. 21, 1973
Matsuura et al. (Matsuura) (European patent application)	0 488 822 A2	Jun. 3, 1992

THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows: claim 23 over Matsuura in view of Maruscak alone or further in view of Murphy or Crater; claims 25-27, 29 and 30 over Matsuura in view of 1) Maruscak and Reed or 2) Maruscak, Reed and either Murphy or Crater; claim 24 over Matsuura in view of 1) Maruscak and Crater or 2) Maruscak, Crater and Murphy; and claim 28 over Matsuura in view of 1) Maruscak, Reed and Crater or 2) Maruscak, Reed, Crater and Murphy.

OPINION

We reverse the aforementioned rejections and, under the provisions of 37 CFR § 1.196(b), enter a new ground of rejection of claims 23-30. Regarding the reversal we need to address only

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the broadest independent claim, i.e., claim 23. Our discussion of this claim applies equally well to the appellants' only other independent claim (27).

Matsuura discloses an electret filter comprising polypropylene fibers and 0.3 part by weight of a fluorine-modified silicone oil (page 8, lines 37-52). Matsuura teaches that the resins which are suitable for use as his electret filter fibers must have an angle of contact with water of at least 95 degrees, and that the silicone oil renders polypropylene suitable for use as a material of the electret filter fibers by sufficiently increasing the angle of contact of the polypropylene with water (page 2, lines 46-47; page 2, line 56 - page 3, line 2).

Maruscak discloses a filter medium which may comprise a microfibrous glass fiber layer upstream from a microfibrous electret and which may be given a fluorochemical treatment to render it both hydrophobic and oleophobic so that it resists plugging and clogging by water and oil aerosols (col. 4, lines 35-47).

The examiner argues that the appellants apparently are correct that Maruscak's exemplary fluorochemical treatment is applied to the surface of glass fibers (answer, page 9). The

examiner argues that the reference cited by Maruscak for an exemplary fluorochemical treatment (U.S. 4,508,775 to Adiletta) teaches that a fluorochemical additive can be applied in a blend containing glass fibers and polymeric material before formation into a fiber filter web. *See id.* The appellants' term "within the web" in claim 23, however, given its broadest reasonable interpretation in view of the specification and prior art, *see In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), means that the additive is within the fibers rather than being applied to the fibers as a surface treatment (*see, e.g.,* specification, pages 9-10). Adiletta applies his treating agent to the surface of fibers, rather than incorporating it into the fibers (col. 5, lines 1-8).

The examiner argues that Murphy discloses using a melt processible, silicone-free, fluorochemical additive within a polychlorotrifluoroethylene electret fiber web to ensure charge stability especially under high moisture or humidity conditions, and that it would have been obvious to one of ordinary skill in the art to include Murphy's additive in Matsuura's fibers to obtain this benefit (answer, page 7). Murphy teaches that his polychlorotrifluoroethylene fibers can contain 2-3 wt% additives and impurities (page 1, lines 67-71). Murphy's disclosed

fluorochemical compounds, however, are monomers which polymerize to form copolymer or terpolymer fibers (page 1, line 79 - page 2, line 8). The fluorochemical compounds are not additive compounds within the fibers.

The examiner points out that Crater's fluorochemical oxazolidinones are among the appellants' additives (specification, page 6), and argues that the appellants' specification (page 1) indicates that Crater's polypropylene, with which the fluorochemical oxazolidinones can be melt blended (col. 8, lines 56-58; col. 9, lines 12-15), is an electret material (answer, page 10). The appellants' specification discloses that polypropylene webs can be used as electret filter media (page 1). The specification, however, also indicates that an electret does not exist until the polypropylene is charged, such as by AC and/or DC corona discharge (pages 1 and 3). Crater teaches that his fluorochemical oxazolidinones provide fiber and film substrates such as textiles, carpets, paper and leather with low surface energy, oil and water repellancy, and anti-soil properties (col. 2, lines 21-30; col. 8, lines 56-65; col. 9, lines 16-22). The examiner has not explained how Crater would have led one of ordinary skill in the art to charge his fibers to form an electret.

For the above reasons we find that the examiner has not set forth a factual basis which is sufficient to establish *prima facie* obviousness of the invention recited in any of the appellants' claims.¹ Accordingly, we reverse the examiner's rejections.

New ground of rejection

Under the provisions of 37 CFR § 1.196(b) we enter the following new ground of rejection.

Claims 23-30 are rejected under 35 U.S.C. § 112, first paragraph, as failing to provide adequate written descriptive support for the claimed invention.

The appellants' independent claims (23 and 27) both require that the additive is silicone free. This requirement was introduced into the claims by amendment (amendments filed August 18, 1997 (paper no. 14, page 2) and February 12, 1998 (paper no. 18, page 2)). The appellants' originally-filed specification discloses particular nonionic oleophobic fluorochemical additive compounds which contain neither silicon nor many of the other known elements, and does not disclose any

¹ Reed is not relied upon by the examiner for a teaching which remedies the deficiencies in the above-discussed references as to the independent claims.

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nonionic oleophobic fluorochemical additive compound which contains either silicon or any of those other known elements. The appellants' express exclusion of silicon-containing nonionic oleophobic fluorochemical additive compounds from the amended claims implies the permissible inclusion of nonionic oleophobic fluorochemical additive compounds containing all other elements which are not expressly excluded. *See Ex parte Grasselli*, 231 USPQ 393, 394 (Bd. App. 1983). Therefore, the exclusion of silicon in particular, from among the other elements which are not disclosed as being contained in the nonionic oleophobic fluorochemical additive compounds, introduces a new concept. *See id.* Hence, the appellants' "silicon free" negative limitation does not have adequate written descriptive support in the appellants' originally-filed specification. *See id.*

DECISION

The rejections under 35 U.S.C. § 103 of claim 23 over Matsuura in view of Maruscak alone or further in view of Murphy or Crater, claims 25-27, 29 and 30 over Matsuura in view of 1) Maruscak and Reed or 2) Maruscak, Reed and either Murphy or Crater, claim 24 over Matsuura in view of 1) Maruscak and Crater or 2) Maruscak, Crater and Murphy, and claim 28 over Matsuura in view of 1) Maruscak, Reed and Crater or 2) Maruscak, Reed, Crater

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and Murphy, are reversed. A new ground of rejection of claims 23-30 has been entered under 37 CFR § 1.196(b).

This decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63,122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

- (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
- (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

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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).

REVERSED, 37 CFR § 1.196(b)

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CHUNG K. PAK)	
Administrative Patent Judge)	
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TERRY J. OWENS)	
Administrative Patent Judge)	APPEALS AND
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