



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
**United States Patent and Trademark Office**  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/774,947	09/11/2015	CRAIG DEPORTER	07812.0119-00000	6934
22852	7590	07/01/2022	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			IVEY, ELIZABETH D	
			ART UNIT	PAPER NUMBER
			1784	
			NOTIFICATION DATE	DELIVERY MODE
			07/01/2022	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

regional-desk@finnegan.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* CRAIG DEPORTER,  
LARRY H. McAMISH, DAVID JAMES WHITEMAN,  
and OCTAVIUS OTHELLO OJU DAVIES

---

Appeal 2021-003598  
Application 14/774,947  
Technology Center 1700

---

Before BEVERLY A. FRANKLIN, GEORGE C. BEST, and  
N. WHITNEY WILSON, *Administrative Patent Judges*.

WILSON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE<sup>1</sup>

Pursuant to 35 U.S.C. § 134(a), Appellant appeals from the Examiner’s Final rejection (mailed July 10, 2020, (“Final Act.”)) of claims 27–29, 32–37, and 41–51. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

---

<sup>1</sup> Appellant refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies ImerTech SAS as the real party in interest. (Appeal Br. 3).

### CLAIMED SUBJECT MATTER

Appellant's disclosure is directed to a composite structure comprising at least two non-woven, polymeric layers. Claim 27, reproduced below from the Claims Appendix, is illustrative of the claimed subject matter:

27. A composite structure comprising at least two nonwoven, polymeric layers bonded to each other, wherein  
at least one of the nonwoven, polymeric layers is spunbonded,  
at least one of the nonwoven, polymeric layers is meltblown,  
at least one of the spunbonded layers comprises inorganic particulate filler in an amount from about 12% by weight to about 16% by weight of the spunbonded layer, and  
each of the meltblown layers comprises less than about 5% by weight inorganic particulate material, based on the total weight of each meltblown layer.

### REFERENCES

The prior art relied upon by the Examiner is:

<b>Name</b>	<b>Reference</b>	<b>Date</b>
McAmish et al.	US 2010/0184348 A1	July 22, 2010
Moore et al.	US 2011/0151737 A1	June 23, 2011

### REJECTIONS

<b>Claim(s) Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/ Basis</b>
27–29, 32–37, 41–51	103(a)	Moore, McAmish

### OPINION

We decide this appeal on an issue common to all of the claims. Accordingly, we focus our discussion on the rejection of claim 27 under 35 U.S.C. § 103(a) as unpatentable over Moore in view of McAmish. The Examiner finds that Moore teaches each element of claim 27, except that

Moore does not teach that at least one of the spunbonded layers comprises inorganic particulate filler in an amount from about 12% by weight to about 16% by weight of the spunbonded layer (Final Act. 3–4). The Examiner further finds that McAmish teaches nonwoven fabrics comprising spunbonded polymeric fibers which in turn comprise a filler such as calcium carbonate particles incorporated in an amount of about 10–15 wt%, which McAmish teaches allows for a decrease in the amount of resin needed without otherwise sacrificing other needed properties (Final Act. 4–5).

The Examiner determines that it would have been obvious to use from 10–15 wt% of filler in one of Moore’s spunbonded layers “to make the final article with comparable quality in terms of fiber strength, texture, and/or appearance at a lower cost due to a reduced amount of resin material” (Final Act. 5).

Appellant argues, inter alia, that a person of skill in the art would not have been motivated to use McAmish’s amount of filler in Moore’s structure because Moore teaches away from using so much filler. Moore discloses:

Fillers if used can be particulate nonthermoplastic or thermoplastic materials. Fillers also may be non-aliphatic polyesters polymers which often are chosen due to low cost such as starch, lignin, and cellulose based polymers, natural rubber, and the like. These filler polymers tend to have little or no crystallinity. ***Fillers, plasticizers, and other additives, when used at levels above 3% by weight, and more certainly above 5% by weight of the aliphatic polyester, can have a significant negative effect on physical properties such as tensile strength of the nonwoven web. Above 10% by weight of the aliphatic polyester resin, these optional additives can have a dramatic negative effect on physical properties.*** Therefore, total optional additives other than the antishrinkage additive preferably are present at no more than 10% by weight, preferably no more than 5% by weight and most preferably no

more than 3% by weight based on the weight of the aliphatic polyester in the final nonwoven article.

(Moore, ¶ 139, emphasis added). Appellant argues that, based on this disclosure, a person of skill in the art would not have combined Moore’s teachings with those of McAmish as set forth in the rejection (Appeal Br. 7–8).

Appellant’s argument is persuasive.

Whether a reference teaches away from a claimed invention is a question of fact. *See In re Harris*, 409 F.3d 1339, 1341 (Fed. Cir. 2005). “A reference may be said to teach away when a person of ordinary skill, upon reading the reference . . . would be led in a direction divergent from the path that was taken by the applicant.” *In re Haruna*, 249 F.3d 1327, 1335 (Fed. Cir. 2001) (quoting *Tec Air, Inc. v. Denso Mfg. Mich., Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999)). “When a piece of prior art ‘suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant’ the piece of prior art is said to ‘teach away’ from the claimed invention.” *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) (quoting *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

In this instance, Moore states that the use of fillers in amounts greater than 3% by weight, and certainly above 5% by weight, “can have a significant negative effect on physical properties such as tensile strength of the nonwoven web” (Moore ¶ 139). In addition, Moore states that “[a]bove 10% by weight of the aliphatic polyester resin” fillers “can have a dramatic negative effect on physical properties” (*Id.*). Thus, we determine that a person of skill in the art would not have sought to modify Moore’s system

by including 12–16 wt% of inorganic filler, because Moore teaches that doing so “can have a dramatic negative effect on physical properties.”

The Examiner contends that Moore “does not clearly establish that inorganic particulate fillers should not be used above 3% by weight or expressly teach away from the combination” because “Moore acknowledges fillers as high as 10%” (Ans. 10, citing Moore ¶¶ 139, 204, and 205).

After reviewing the respective positions of the Examiner and Appellant, we agree with Appellant that Moore teaches away from using 12–16% by weight of an inorganic particulate filler in at least one of the spunbonded layers because Moore states that using more than 10% by weight of an inorganic particulate filler “can have a dramatic negative effect on physical properties” of the system (Moore ¶ 139). Moore does indicate that “total optional additives including any particulate phase other than antishrinkage additive, *preferably* are present at no more than 10% by weight, *preferably* no more than 5% by weight and, most *preferably* no more than 3% by weight” (Moore ¶ 205, emphasis added). In some circumstances, the use of the word “preferably” in this context might militate against a finding of teaching away. However, in this instance Moore’s specific statement that using above 10% by weight “can have a dramatic negative effect on physical properties” is direct and specific enough to outweigh the possibility that a person of skill in the art might see the word “preferably” and consider using more than 10 wt% of filler.

Accordingly, we reverse the rejection.

## CONCLUSION

The Examiner’s rejection is reversed.

Appeal 2021-003598  
Application 14/774,947

DECISION SUMMARY

<b>Claim(s) Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
27–29, 32–37, 41–51	103(a)	Moore, McAmish		27–29, 32– 37, 41–51

REVERSED