



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.
11/906,217	10/01/2007	Troy Furgal	7746	6276
29602	7590	10/28/2016	EXAMINER	
JOHNS MANVILLE 10100 WEST UTE AVENUE PO BOX 625005 LITTLETON, CO 80162-5005			LOPEZ, RICARDO E.	
			ART UNIT	PAPER NUMBER
			1786	
			NOTIFICATION DATE	DELIVERY MODE
			10/28/2016	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):

lavoie@jm.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* TROY FURGAL, RAYMOND C. SWANN, and  
CHRISTOPHER JAMES GRIFFIN

---

Appeal 2015-004044  
Application 11/906,217  
Technology Center 1700

---

Before CHUNG K. PAK, CHRISTOPHER L. OGDEN, and  
MICHAEL G. McMANUS, *Administrative Patent Judges*.

McMANUS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Examiner finally rejected claims 1–14 of Application 11/906,217 under 35 U.S.C. § 103(a) as obvious. Final Act. (Apr. 4, 2014). Appellants<sup>1</sup> seek reversal of these rejections pursuant to 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6.

For the reasons set forth below, we AFFIRM.

---

<sup>1</sup> Johns Manville Corporation is identified as the real party in interest. Appeal Br. 1.

## BACKGROUND

The application at issue describes a roofing membrane with improved edge flexibility. The roofing membrane includes a base reinforcement layer bonded to a top reinforcement layer of lesser width. Spec. 2. The roofing membrane further includes a matrix of bitumen or polymer which coats the top reinforcement layer. *Id.* The portion of the roofing membrane that includes a base reinforcement layer but not a top reinforcement layer has improved flexibility. This improved flexibility is useful when the roofing membranes are installed. It allows the edge (“opposite edge portion”) of one roofing membrane to flex so as to overlap a portion (“selvage edge”) of an adjacent roofing membrane.” *Id.*

Claim 1 is representative of the pending claims and is reproduced below:

1. A roofing membrane comprising:  
a base reinforcement layer having a width W;  
a top reinforcement layer bonded to the base reinforcement layer, wherein the top reinforcement layer has a width of about  $80\% \pm 10\%$  of width W; and  
a matrix coating the top reinforcement layer bonded to the base reinforcement layer, wherein the matrix comprises one or more materials selected from the group consisting of bitumen, modified bitumen, one or more polymeric materials, and mixtures thereof.

Appeal Br. 8 (Claims App.).

## REJECTIONS

On appeal, the Examiner maintains the following rejections:

1. Claims 1–14 are rejected under 35 U.S.C. § 103(a) as obvious over Cogliano (US 4,503,107, iss. Mar. 5, 1985) (“Cogliano”). Final Act. 2.

2. Claim 10 is rejected under 35 U.S.C. § 103(a) as obvious over Cogliano in view of Swann (US 6,962,738, iss. Nov. 8, 2005) (“Swann”). Final Act. 6.

#### DISCUSSION

Appellants assert error in the rejection on the basis that Cogliano discloses only a single reinforcement layer while all claims at issue require two reinforcement layers.

Cogliano teaches a barrier “capable of being readily applied on exterior structural surfaces, such as foundation walls, as a water drainage enhancer/waterproofing barrier.” Cogliano, 1:12–14. The barrier of Cogliano includes a porous board (2) adhered to a bitumen layer (7). Cogliano, 3:27–30 (“The preformed non-porous sheet (7) is directly adhered to the porous board (2). The adhesive sheet (7) will be described herein in terms of the preferred material, an adhesive bituminous membrane.”). In one embodiment, the bituminous layer may extend beyond the porous board. *Id.* at 6:20–22. Further, Cogliano teaches that a fibrous cloth (11) may be adhered to the porous board on the side opposite the bitumen layer. *Id.* at 4:62–65; Fig. 2. Cogliano also teaches that in addition to, or in alternative to, the fibrous cloth, coating (11C) may be applied to the porous surface. *Id.* at 4:65–5:26; Fig. 2A.

In the Final Rejection, the Examiner responds to Appellants’ argument that Cogliano “does not teach or suggest a roofing membrane having two reinforcement layers, wherein the top layer has a smaller width than the bottom layer, where at least the top layer is coated with the matrix.” Final Act. 7–8. The Examiner first finds that “although Cogliano does not call the bitumen layer a reinforcement layer, it serves as reinforcement to

other layers so it can reasonably read on Applicant's claims.” *Id.* at 8. The Examiner further finds that “the second major surface (of the porous board), considered first layer, has adherently attached to it a fibrous cloth or mat formed from woven or nonwoven organic or inorganic natural or synthetic fibers, considered to be the second layer [Col. 3, lines 9 – 13].”

In the Answer, the Examiner finds

The barrier structure [of Cogliano] comprises a porous, substantially planar member having one of its major surfaces covered with an adhesive bituminous sheet material (considered a reinforced layer corresponding to Appellant's base layer). Further, the porous structure suitable for use in the disclosure is a substantially rigid, substantially planar sheet-like structure having a plurality of pores therein referred as porous board (corresponding to Appellant's second top reinforcing layer).

Answer 4. That is, the Examiner equates the porous board of Cogliano to the “top reinforcement layer” of claim 1 and the bituminous layer of Cogliano to the “base reinforcement layer” of claim 1. The bituminous layer of Cogliano can be formed of “a single or multiple layers” and “can have embedded therein a web or cloth formed from a woven or non-woven organic or inorganic, natural or synthetic fibers (staple or continuous filament).” Cogliano, 3:58–63. On this record, Appellants do not show that the porous board and the bituminous layer taught by Cogliano are not capable of providing reinforcement. App. Br. 2–6. Nor do Appellants refer to any description or definition in the Specification that would exclude the porous board and bituminous layer taught by Cogliano as reinforcement layers. *Id.* Accordingly, Appellants do not identify reversible error in the Examiner’s finding that there are two reinforcement layers in Cogliano.

Although not squarely raised by the Appellants, the Board notes that Claim 1 requires “a matrix coating the top reinforcement layer bonded to the

base reinforcement layer, wherein the matrix comprises one or more materials selected from the group consisting of bitumen, modified bitumen, one or more polymeric materials, and mixtures thereof.” It is the Board’s understanding that the Examiner finds fibrous cloth (11) and/or coating (11C) to correspond to the required matrix. Cogliano teaches “a film coating of release agent (11C)” on upper surface 5. *Id.* at 5:11–12. In this regard, Cogliano provides as follows:

The barrier (1), with or without the fibrous cloth (11), can be stored, transported and sold with a coating (11C) of a non-adherent composition with respect to the adhesive sheet (7) such as of a release agent as described above. The coating (11C) is a film of release agent containing composition applied directly to surface (5) or to the combination of 5 and 11 (when the cloth (11C) is used) by conventional application such as by spraying, brushing or the like.

Cogliano, 4:65–5:5. The “release agent described above” is “any commercial release agent such as a dispersion of a silicon compound, for example, a dispersion of poly(dimethyl siloxane).” *Id.* at 4:59–61. Poly(dimethyl siloxane) is a polymer that may correspond to the claimed polymer matrix coating.

In view of the foregoing, the Appellants have failed to show error in the rejections noted above.

CONCLUSION

The rejection of claims 1–14 is affirmed.

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