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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 12/712,621 | 02/25/2010 | James P. Sullivan | MI/329 | 3074 |

133372 7590 11/02/2016
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| EXAMINER |
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SANDERSON, LEE E

| ART UNIT | PAPER NUMBER |
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1782

| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|
|-------------------|---------------|

11/02/2016

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES P. SULLIVAN and MICHAEL MCMANAWAY

Appeal 2015-002131
Application 12/712,621
Technology Center 1700

Before GEORGE C. BEST, MONTÉ T. SQUIRE, and
JEFFREY R. SNAY, *Administrative Patent Judges*.

SNAY, *Administrative Patent Judge*.

DECISION ON APPEAL¹

Appellants² appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–19. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We cite to the Specification (“Spec.”) filed Feb. 25, 2010; Final Office Action (“Final Act.”) mailed Jun. 13, 2013; Examiner’s Answer (“Ans.”); and Appellants’ Appeal Brief (“App. Br.”) and Reply Brief (“Reply Br.”).

² Appellants identify W. L. Gore & Associates, Inc., as the real party in interest. Br. 2. We apply our own page numbering to Appellants’ un-numbered Appeal Brief.

BACKGROUND

The subject matter involved in this appeal relates to reinforced elastomers. Spec 1. Claim 1 is reproduced from the Claims Appendix of the Appeal Brief as follows:

1. A composition comprising an elastomer and discrete, flat pieces of porous material distributed throughout said elastomer.
Each of claims 2–19 depends directly or indirectly from claim 1.

REJECTIONS

The Examiner maintained the following grounds of rejection:³

- I. Claims 1–7, 11–17, and 19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Nasreddine⁴ and Suzuki.⁵
- II. Claims 1, 2, 8–11, and 19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Cuscurida⁶ and Suzuki.
- III. Claims 1, 2, and 11–19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ward⁷ and Suzuki.

DISCUSSION

Upon consideration of the evidence on this appeal record in light of the respective positions advanced by the Examiner and Appellants, we determine that a preponderance of the evidence supports the Examiner's determination that the applied prior art references would have rendered the

³ Final Act. 6–13; Ans 2–9. Additional grounds of rejection under 35 U.S.C. § 112 were withdrawn. Ans. 9.

⁴ US 2007/0197702 A1, published Aug. 23, 2007 (“Nasreddine”).

⁵ US 4,454,249, issued Jun. 12, 1984 (“Suzuki”).

⁶ US 4,301,110, issued Nov. 17, 1981 (“Cuscurida”).

⁷ US 5,929,143, issued Jul. 27, 1999 (“Ward”).

subject matter recited in claims 1–19 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103(a). Accordingly, we sustain the Examiner’s § 103(a) rejections of the above claims for the reasons set forth in the Final Action and the Answer. We add the following primarily for emphasis and completeness.

I

With regard to Rejection I, Appellants argue the rejected claims as a group. App. Br. 8–10; Reply Br. 2–3. In accordance with 37 C.F.R. § 41.37(c)(1)(iv), we select claim 1 as representative, and decide the propriety of Rejection I based on the representative claim alone.

The Examiner found, and Appellants do not dispute, that Nasreddine discloses an elastomer composition reinforced with glass fibers, the composition being intended for use in a molding process. *Compare* Final Act. 6–7 *with* App. Br. 8–10; Reply Br. 2–3. Neither do Appellants dispute the Examiner’s finding that Suzuki teaches that “by replacing traditional glass fiber reinforcing materials with discrete pieces of expanded PTFE⁸, it is possible to produce a reinforced polymer material that is easier to mold.” *Compare* Final Act. 7 *with* App. Br. 8–10; Reply Br. 2–3. In light of these teachings, the Examiner found that one of ordinary skill would have had reason to substitute expanded PTFE for Nasreddine’s reinforcing glass fibers “in order to produce a reinforced polymer material that is easier to mold than a composition comprising glass fiber filler.” Final Act. 7.

Appellants’ principal argument against Rejection I is that “Suzuki is directed exclusively to incorporation of fragments into a plastic.” App.

⁸ Polytetrafluoroethylene. *See* Final Act. 7.

Br. 9. Appellants contend there is “no teaching or suggestion of incorporating the [PTFE] fragments into other materials, especially not elastomers.” *Id.* In their Reply Brief, Appellants add that “[p]lastics and elastomers have very different rheological behavior,” but do not elaborate on those purported differences or how any such difference might weigh against the Examiner’s finding in this case.⁹ Reply Br. 2.

Appellants’ arguments are not persuasive of reversible error. “[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Here, as the Examiner found, Final Act. 7; Ans. 3, both Nasreddine and Suzuki are concerned with reinforced polymer compositions that are moldable. *See* Nasreddine at ¶ 60 (“The elastomeric composition according to the present invention is especially suitable for injection molding . . .”); Suzuki at col. 1, ll. 21–21) (“It is an object of this invention to provide reinforced plastic compositions which . . . are easy to mold in a comparatively short time.”). In light of the substantial overlap in materials (reinforced polymer compositions) and purpose (moldability), we are persuaded that the evidence of record supports Examiner’s finding that one of ordinary skill would reasonably have expected Suzuki’s technique of improving moldability by substituting PTFE for glass fibers similarly would have improved the moldability in Nasreddine’s elastomer composition. *See*

⁹ Appellants do not particularly contest the Examiner’s interpretation of the term, “plastic,” in Suzuki as being generic and inclusive of elastomers and other polymers which are capable of being shaped or formed. *Compare* Ans. 10 *with* Reply Br. 2–3.

also Nasreddine at ¶ 4 (“Improvements in the properties of HXNBR [elastomer] are constantly sought, and often for this purpose new and unconventional additives and compounds are mixed or blended with HXNBR.”). Appellants’ unsupported attorney argument that plastics and elastomers significantly differ in rheological behavior is unavailing in that regard. *See In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (“Attorney’s argument in a brief cannot take the place of evidence.”).

Appellants further argue that Nasreddine “discloses only fine particle fillers” whereas Suzuki “teaches large fragments of material as fillers.” App. Br. 8. However, Appellants do not point to any passage in Nasreddine where any given dimensions are disclosed for the reinforcing glass fibers. The Examiner found that Nasreddine provides preferred size ranges for certain agglomerated mineral particles, but is silent as to suitable dimensions for the disclosed reinforcing glass fibers. Ans. 9–10. We fully agree with the Examiner’s reasoning that “Nasreddine’s silence regarding the size of the additional [glass fiber] filler materials cannot be taken as a teaching away” from the substitution of Suzuki’s PTFE pieces. *Id.* at 10.

Lastly, Appellants argue that “the surprising results achieved with the present invention are sufficient to . . . establish patentability for the subject claims.” App. Br. 9. Particularly, Appellants contend that “elastomers with filler material as specifically defined in the subject claims demonstrate dramatically better tensile strength, tear strength, and flexibility than one skilled in the art could reasonably expect from the disclosures of the references.” App. Br. 9–10. Appellants point us to no factual evidence or technical reasoning to support the conclusory statement that improvements in the above-listed properties would have been unexpected. On the other

hand, the Examiner found—and Appellants do not dispute—that Suzuki recognized the same property improvements obtained by incorporating pieces of porous PTFE. *Compare* Ans. at 11–12 (citing Suzuki at col. 1, ll. 25–26; col. 3, l. 59–col. 4, l. 3) *with* Reply Br. 2–3. On this record, we find Appellants’ argument insufficient to demonstrate unexpected results.

For the foregoing reasons, we sustain Rejection I.

II, III

Appellants’ arguments against Rejections II and III mirror those presented and discussed above in connection with Rejections I and II. As such, we sustain Rejections II and III for the reasons set forth above.

DECISION

The Examiner’s decision rejecting claims 1–19 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.

AFFIRMED