

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ALPINESTARS S.P.A. and ALIPINESTARS USA INC.,
Petitioner,

v.

DAINESE S.P.A.,
Patent Owner.

IPR2025-00750
Patent 12,012,065 B2

Before BENJAMIN D. M. WOOD, ROBERT L. KINDER, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

WOOD, *Administrative Patent Judge*.

DECISION

Denying Petitioner's Request for Rehearing of
Decision Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Alpinestars S.p.A. and Alpinestars USA Inc. (“Petitioner”) requests rehearing of our Decision Denying Institution of *Inter Partes* Review (Paper 15, “Decision” or “Dec.”). Paper 16 (“Rehearing Request” or “Reh’g Req.”). In the Decision, we determined that Petitioner did not demonstrate a reasonable likelihood of prevailing in showing that any of claims 1–22 of U.S. Patent No. 12,012,065 B2 (Ex. 1001, “the ’065 patent”) is unpatentable. The Petition raised three proposed grounds of unpatentability, only two of which are at issue in the Rehearing Request: (1) Claims 1–22, alleged to be unpatentable under 35 U.S.C. § 103 over EP’536,¹ and CN’180²; and (2) Claims 1–22, alleged to be unpatentable under 35 U.S.C. § 103 over EP’536, CN’180, and Hutton.³ See Reh’g Req. 1–2 (requesting reconsideration of grounds 1 and 2). For the reasons set forth below, we deny the Rehearing Request.

II. STANDARD OF REVIEW

“A party dissatisfied with a decision may file a single request for rehearing without prior authorization from the Board.” 37 C.F.R. § 42.71(d). The request must “specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, a reply, or a sur-

¹ EP 2 879 536 B1 (Jul. 31, 2012) (Ex. 1004).

² CN 108968180 A (pub. Dec. 11, 2018) (Ex. 1006).

³ US 3,823,711 (July 16, 1974) (Ex. 1008).

reply.” *Id.* “When rehearing a decision on petition, a panel will review the decision for an abuse of discretion.” 37 C.F.R. § 42.71(c).

III. DISCUSSION

In the Petition, Petitioner asserted that a POSITA would have been motivated to “replace [EP’536’s] plurality of individual envelopes 20, each with its own gas generating agent 18,” with CN’180’s “[o]ne inflatable device with strip-shaped inflation units 12 connected to one inflation chamber 11,” in order to “simplify[] the design and operation” of EP’536’s device and to allow it “to be easily reusable by having only one mechanism to recharge.” Pet. 15 (citing Ex. 1003 ¶ 73). Although Petitioner did not explain how this modification would have “simplify[ied] the design and operation” of EP’536’s device, we surmised (and Petitioner does not dispute in its Rehearing Decision) that Petitioner believed the modification “would have allowed replacing a plurality of inflators with a single inflator like that used by the CN’180 device.” Dec. 17–18.

We determined that Petitioner’s articulated reasons for combining EP’536 with CN’180 lacked a rational underpinning because EP’536’s inflation mechanism differs fundamentally from CN’180’s inflation mechanism. Dec. 17–18. As we stated, whereas CN’180’s fall-protection belt uses an airbag that requires an external source of pressurized air to inflate, EP’536’s garment does not need an external inflation device because “the gas generating agent 18 in each envelope automatically generates gas and inflates the envelopes in response to rising temperatures.” *Id.* at 18 (citing Ex. 1004 ¶ 15; Ex. 1005 ¶¶ 5, 19). This difference reflects the fundamentally different purposes of the two devices: CN’180’s device is

designed to provide “fall protection” to, e.g., “elderly people,” (Ex. 1005 ¶ 1, 3), whereas EP’536’s device provides “adaptive thermal insulation” for, e.g., garments worn by fire fighters. Ex. 1004 ¶¶ 1–3, 250.

Because of the different means by which EP’536’s and CN’180’s devices inflate and the different purposes for doing so, we were not persuaded that one of ordinary skill in the art would have combined the references as Petitioner proposed. Dec. 18. We further noted that the modification would not have improved the reusability of EP’536’s device “by having only one mechanism to recharge,” because EP’536’s “gas generating agent does not need any ‘mechanism to recharge.’” Dec. 18. Instead, we noted EP’536’s teaching that its gas generating agent “automatically recombines or condenses in response to a temperature decrease to return the envelopes, and therefore the garment, to its original thickness, at which point the gas generating agent is ready for subsequent reactivation.” *Id.* (citing Ex. 1004 ¶¶ 139–141). Finally, we determined that replacing EP’536’s envelopes with CN’180’s airbag “would have made EP’536’s invention unsuitable for its intended purpose: providing a protective garment with ‘adaptive thermal insulation.’” Dec. 19. We stated that “Petitioner does not suggest, and we have found nothing in the record to establish, that CN’180’s airbag would provide this feature.” *Id.* at 20.

Petitioner first argues that “the Board erroneously adopted Patent Owner’s position that a POSITA would not have combined EP’536 and CN’180 because EP’536 does not relate to ‘air bags.’” Reh’g Req. 2 (citing Dec. 19–20). This was error, according to Petitioner, because “[n]either the ’065 patent specification nor its claims use the term ‘air bag’ or ‘airbag,’” but instead “recite a ‘protective device’ . . . or a ‘method for making a

protective device,” which is similar to the “personal protective equipment” that EP’536 discloses. *Id.* at 2–3.

Petitioner misstates the Decision’s reasoning. As is clear from the previous discussion, we determined that Petitioner’s articulated reasons for combining EP’536 with CN’180 lacked a rational underpinning, not because “EP’536 does not relate to ‘air bags,’” but because the means by which EP’536’s device inflates differs fundamentally from that of CN’180’s device. Dec. 17–18. Petitioner did not acknowledge this critical difference in the Petition, and continues not to do so in its Rehearing Request.

Petitioner next argues that there is no evidence supporting our finding that “replacing EP’536’s envelopes with CN’180’s airbag would have made EP’536’s invention unsuitable for its intended purpose: providing a protective garment with ‘adaptive thermal insulation.’” Reh’g Req. 3–4 (quoting Dec. 19–20). But that finding follows directly from EP’536’s teaching that the adaptive thermal insulation results from the use of the disclosed “gas generation agent.” *See* Ex. 1004 ¶¶ 15–16 (teaching that its gas generating agent is adapted to increase pressure and therefore thermal insulation capability in response to increasing temperature, and thereby provides “adaptive thermal insulation”). Petitioner’s proposed modification would remove EP’536’s gas generating agent and the individual envelopes that contain it, and thereby would remove the very mechanism by which EP’536 provides “adaptive thermal insulation.”

Petitioner further argues that we erred in finding that EP’536 does not use “inflators.” Reh’g Req. 5. This finding is incorrect, according to Petitioner, because “EP’536 expressly discloses that an ‘inflator’ in the form of a ‘dosing aid’ can be used to facilitate the chemical reaction in the

envelope.” *Id.* (citing Ex. 1004 ¶ 106). Petitioner characterizes EP’536’s dosing aids as “an external source of inflation.” *Id.* at 6. Thus, according to Petitioner, “the combination of EP’536 and CN’180 would benefit from the precise modification advanced in the Petition and supporting declaration.” *Id.*

Petitioner mischaracterizes EP’536’s “dosing aid.” EP’536 teaches that because some gas generating agents may be “difficult to handle” or “hazardous,” a dosing aid “*might* be used” to “facilitate placement of the gas generating agent in the cavity when manufacturing the envelope.” Ex. 1004 ¶¶ 105, 106 (emphasis added). The dosing aid, which may be a “sponge-like material” or “blotting paper,” is “soaked with a predefined amount of gas generating agent” and “inserted into the cavity.” *Id.* ¶ 192, Fig. 4b. When the gas generating agent is activated by rising temperatures, it is released from the dosing aid and inflates the cavity. *Id.*

Petitioner does not explain in the Rehearing Request how EP’536’s dosing aid suggests that “the combination of EP’536 and CN’180 would benefit from the precise modification advanced in the Petition and supporting declaration.”⁴ To the extent that this contention is based on the dosing aid being “an external source of inflation,” it is clear from EP’536 that it is neither “external” nor a “source of inflation.” It is not external to the envelopes because if it is used it would be located within each envelope. *See* Ex. 1004 ¶ 108 (the dosing aid is “safely enclosed by the envelope enclosing the cavity”). It is not a “source of inflation,” because it simply aids in handling EP’536’s “source of inflation,” i.e., the gas generating agent

⁴ Petitioner does not discuss the dosing aid in the Petition.

that inflates the envelopes when activated by rising temperatures. *Id.* ¶ 192. In sum, this argument does not persuade us that we misapprehended or overlooked any matter in rendering our decision.⁵

Finally, Petitioner argues that we incorrectly evaluated its *KSR*-based rationales for combining EP’536 and CN’180. Reh’g Req. 6–7. First, Petitioner asserts that we “improperly rejected Petitioner’s ‘simple substitution’ evidence in view of [the Board’s] incorrect conclusion that EP’536 does not disclose an ‘external source of inflation [EP’536’s dosing aids].” *Id.* at 6 (citing Dec. 18–19). This argument is unpersuasive at least because, as we discussed above, EP’536’s dosing aids do not constitute an external source of inflation. Petitioner further argues that we incorrectly evaluated its “obvious to try” rationale because, contrary to our analysis, Petitioner did in fact identify a problem to be solved by its “finite number of solutions”: “simplify[ing] the design and reduc[ing] the number of required inflation mechanisms.” *Id.* at 6–7.

The Petition’s entire “obvious to try” discussion is as follows:

[A] POSITA would have found it obvious to try a one-piece airbag 10 with strip-shaped inflation units 12 in the EP’536-CN’180 airbag system because it would have been a selection from a finite number of identified predictable solutions (i.e., using one chamber with connected individual inflation units 12 versus multiple individual envelopes 20).

⁵ Petitioner also argues that dosing aids are “needed in order to make the disclosed device reusable.” Reh’g Req. 5–6. This is incorrect, as EP’536 conveys that the reusability of the device is a result of the gas generating agent condensing or recombining when temperatures fall. Ex. 1004 ¶¶ 139–141. Even if it were true, however, it is unclear how it would support Petitioner’s argument.

Pet. 16. As is evident, Petitioner did not identify a design need, market pressure, or other problem that would have been addressed by its identified “solutions,” and therefore we were not persuaded by this rationale. Dec. 19. Petitioner’s attempt to cure this deficiency in its Rehearing Request is tardy. We cannot misapprehend or overlook an assertion that Petitioner fails to make in the Petition. It is also insufficient. Petitioner does not provide any evidence of a *known* design need or market pressure to “simplify [EP’536’s] design” or reduce the number of “required inflation mechanism” it uses.

IV. CONCLUSION

For the foregoing reasons, Petitioner’s Rehearing Request is denied

V. ORDER

For the reasons given, it is

ORDERED that the Petitioner’s Rehearing Request is *denied*.

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