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TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVELAND, OH 44114			BERGIN, JAMES S	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEFAN HEIGL, JOHANN HINKOFER,
CHRISTOPH KNOLLHUBER, CHRISTOPH MOCKER, and
ANDREAS SEIDEL

Appeal 2018-004111
Application 14/499,322
Technology Center 3600

Before BENJAMIN D. M. WOOD, NATHAN A. ENGELS, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

WOOD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from a rejection of claims 1–3, 5–8, and 12–15. Final Act. 1 (summary). Claims 4 and 9–11 are withdrawn. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as TRW Airbag Systems GMBH. App. Br. 2.

THE INVENTION

The claims are directed to an igniting unit, especially for an airbag inflator. Abstract. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An igniting unit (10) comprising:
an electric igniter (11) including a first inner cap (12)
which forms a space (14) filled with a booster propellant charge
with a second outer cap (13), wherein
the second outer cap (13) is in the form of an electrically
non-conductive insulating cap.

REFERENCES

Whang	US 6,009,809	Jan. 4, 2000
Matsuda	US 7,343,859 B2	Mar. 18, 2008

REJECTION

Claims 1–3, 5, 6–8 and 12–15 are rejected under 35 U.S.C. § 103 as unpatentable over Matsuda and Whang.

ANALYSIS

Appellant argues the patentability of independent claim 1, and relies on the patentability of claim 1 to support the patentability of claims 2, 3, 5, 6–8, and 12–15. *See* App. Br. 3, 6–12. Therefore, we treat claim 1 as representative of the appealed claims, and decide the appeal of this rejection on the basis of claim 1 alone. 37 C.F.R. § 41.37(c)(1)(iv). Having considered all of Appellant’s arguments and evidence of record, we are not persuaded that the Examiner erred in rejecting claim 1 as unpatentable over Matsuda and Whang.

The Examiner finds, and Appellant does not dispute, that Matsuda’s Figure 4 discloses an igniting unit as recited in claim 1, except that

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Matsuda's second cap 42 is made of metal rather than an electrically non-conductive material. Final Act. 2. The Examiner therefore relies on Whang to teach an igniting unit with an outer cap made from an insulating material, e.g., plastic. *Id.* at 2–3. The Examiner determines that it would have been obvious to one of ordinary skill in the art at the time of the invention to form Matsuda's outer cup 42 from an insulating material, as taught by Whang, "so as to protect the igniting unit from stray aberrant currents." *Id.* at 3.

Appellant first argues that one of ordinary skill in the art would have combined the teachings of Matsuda and Whang in a different manner than that proposed by the Examiner. App. Br. 7–8. Appellant asserts that Matsuda's outer cap 42 is analogous to Whang's output cup 34 rather than to Whang's insulating cup 38, because both are "tasked with exerting pressure upon the respective propellant contained therein," and both "directly encapsulate[]" and "exert[] pressure" on propellant contained in the igniting unit. *Id.* at 8. Thus, according to Appellant, "the combined teachings of Matsuda and Whang would have lead one of ordinary skill in the art to arrange the insulating cup 38 of Whang over the metallic outer cap 42 of Matsuda in order to provide for electrical insulation of an assembly, as taught by Whang," instead of changing the material used to make Matsuda's outer cap 42. *Id.*

This argument is not persuasive of Examiner error. Assuming Appellant is correct that one of ordinary skill in the art might have combined Matsuda and Whang in the manner that Appellant contends, this does not mean that there cannot be additional obvious ways that one of ordinary skill in the art would have combined the references, including that proposed by the Examiner. Implicit in Appellant's argument is the notion that Matsuda's outer cap 42 must be made of metal to be able to "directly encapsulate[]"

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and “exert pressure upon” propellant. *See id.* at 8–9. But Appellant does not provide any evidence in the record that one of ordinary skill in the art would not have been able to form an outer cap from an insulating material such as plastic that is able to fulfill these functions.

Appellant also argues that the proposed modification would change the principle of operation of Matsuda. App. Br. 10. Appellant asserts that “one principle of Matsuda is to have a metallic outer cap 42 that is secured to the metallic inner cap 41 by welding,” but “[i]f the outer cap 42 were changed to a plastic material as proposed by the Examiner, it would no longer be possible to weld the outer cap 42 to the inner cap 41 as explicitly called for in Matsuda, thereby changing the principle of operation of Matsuda.” *Id.* (citing Matsuda, 8:11–12, 65–67, 9:5–9).

This argument is also unpersuasive. In particular, we are not persuaded that welding an outer cap to an inner cap is a principle of operation of Matsuda. Matsuda teaches that inner cap 41 and outer cap 42 can be “mutually connected together by, for example, laser welding *or the like.*” Matsuda, 8:9–12 (emphasis added). This indicates that non-welding methods of connecting the caps together are contemplated, including methods that can be used to connect a metal cap to a plastic cap.

Finally, Appellant takes issue with the Examiner’s reason to combine Matsuda with Whang, i.e., “to protect the igniting unit from stray aberrant currents.” Reply Br. 2 (quoting Ans. 3). Appellant asserts that “there is no discussion in either Matsuda or Whang of igniting units being negatively affected by ‘stray aberrant currents.’” *Id.*

As a preliminary matter, this argument was raised for the first time in the Reply Brief. Appellant has not explained why this argument was not first raised in the Appeal Brief. *See* 37 C.F.R. § 41.41(b)(2). In any event,

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this argument is unpersuasive. Whang teaches providing electrical insulation to the exterior of an airbag igniting unit. Whang, 2:9–11. Indeed, Appellant does not dispute that one of ordinary skill in the art would have provided electrical insulation to Matsuda’s igniting unit in light of Whang. *See* App. Br. 7–8 (“the combined teachings of Matsuda and Whang would have lead one of ordinary skill in the art to arrange the insulating cup 38 of Whang over the metallic outer cap 42 of Matsuda in order to provide for electrical insulating of an assembly, *as taught by Whang*”) (emphasis added). Electrically insulating Matsuda’s igniting unit would have protected it from “stray aberrant currents.”

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1–3, 5–8, and 12–15	§ 103, Matsuda and Whang	1–3, 5–8, and 12–15	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED