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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SHIGEMI HASHIZAWA, HIDEHIRO ICHIKAWA, and
EIICHI TOHYAMA¹

Appeal 2018-006281
Application 14/277,438
Technology Center 3700

Before MICHAEL L. HOELTER, NATHAN A. ENGELS, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

HOELTER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is a Decision on Appeal, under 35 U.S.C. § 134(a), from the Examiner’s final rejection of claims 1–3. App. Br. 1. We have jurisdiction under 35 U.S.C. § 6(b). For the reasons explained below, we do not find error in the Examiner’s rejection of these claims.

Accordingly, we AFFIRM the Examiner’s rejections.

¹ “The real party in interest is Yazaki Corporation.” App. Br. 3. We proceed on the basis that, for purposes of this Appeal, Yazaki Corporation is the “Appellant.”

CLAIMED SUBJECT MATTER

The disclosed subject matter relates “to a method for manufacturing a high voltage wire harness to be arranged in a movable body, such as an automobile.” Spec. 1:14–15. Claims 1 and 2 are independent. Claim 1 is illustrative of the claims on appeal, and is reproduced below.

1. A method for manufacturing a wire harness, comprising:
 - preparing a coaxial composite wire in which a plurality of conductive paths are coaxially arranged;
 - inserting the coaxial composite wire into a tubular body;
 - treating ends of the conductive paths in a state the coaxial composite wire is inserted into the tubular body so that the ends of the conductive paths have a plus circuit and an electric wire for a minus circuit;
 - bending the tubular body to form a wire harness having a shape corresponding to an arrangement pathway, in a state where the ends of the conductive paths are treated;
 - forming one of a braid and a metallic foil into an electromagnetic shield member; and
 - forming an electromagnetic shield structure on each end of one of the coaxial composite wire and the tubular body before bending the tubular body or after bending the tubular body, by using the electromagnetic shield member.

REFERENCES

Kihira	US 2004/0099427 A1	May 27, 2004
Masuoka ²	JP 56-050489 B	Nov. 30, 1981

THE REJECTION ON APPEAL

Claim 1–3 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kihira and Masuoka.

² We rely on the English language translation of this document.

ANALYSIS

Appellant argues claims 1–3 together. App. Br. 10–13. We select claim 1 for review, with claims 2 and 3 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner relies on Kihira for disclosing three wires arranged as claimed but acknowledges that the three wires are not “coaxial” as recited. Final Act. 2–4. The Examiner relies on Figures 2 and 4 of Masuoka for disclosing a similar “coaxial cable” arrangement. Final Act. 4 (also referencing Masuoka Fig. 5). The Examiner concludes that it would have been obvious “to modify the process of Kihira by utilizing . . . a coaxial composite wire of the type disclosed by Masuoka.”³ Final Act. 4.

Claim 1 is directed to inserting coaxial composite wire into a tubular body and then treating the wire ends thereof. Thereafter, claim 1 recites, “bending the tubular body to form a wire harness . . . in a state where the ends of the conductive paths are treated.” Appellant contends that the references “*Fail to Disclose Bending*” as recited (i.e., after treatment of the wires). App. Br. 10; *see also id.* at 11 (“Kihira fails to disclose when to produce the bends”); Reply Br. 2 (“**Kihira and Masuoka Fail to Disclose the Claimed Order of the Bending and Treatment Process**”).

Regarding the recited order of treating (terminating) the wire ends before bending, the Examiner states that the bending of Kihira’s wired tube “could be performed either before or after attaching terminals 40, and both possibilities are therefore implied.” Final Act. 5. The Examiner reiterates,

³ “Masuoka is relied upon for its teaching of a coaxial composite wire as a substitute for the three separate wires” of Kihira. Ans. 4.

“bending the tubular body 51 [of Kihira] either before or after attaching the terminals are equally obvious possibilities.” Final Act. 5; *see also* Ans. 7 (“as a matter of choosing[] from among a limited number of possible orders of manufacturing steps”).

Kihira teaches “wire-side terminals fixedly secured to the two end portions of each of the three wires 30.” Kihira ¶ 22. Kihira also discloses a “cylindrical-shaped pipe made of metal” (i.e., item 51) that “has an inside diameter that allows the three wires 30 to be inserted.” Kihira ¶ 26. Kihira further states, “[t]he main shield portion 51 *is bent* along the wiring route of the wire harness 1.” Kihira ¶ 26 (*italics added*). Kihira does not explicitly disclose the order of this treatment/bending operation.

Although we agree with Appellant that “Kihira is silent” (App. Br. 11; *see also* Reply Br. 3) as to the exact order involved, the Examiner’s rejection is based on obviousness, not anticipation. The question is whether one skilled in the art would have found it obvious at the time of the invention to choose from among the few possibilities reasonably presented by Kihira. *See* Ans. 6, 7. We believe the Examiner has the better of this argument. Further, Appellant does not explain how it would not have been obvious to select from among these limited possibilities. Instead, Appellant’s argument is based on Kihira’s silence, and does not take into account “the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

Appellant additionally contends that the Examiner asserts that the order of the bending “is inherently disclosed by Kihira.” App. Br. 12; *see also id.* at 13; Reply Br. 3. The Examiner did not rely on the manufacturing order being “inherently disclosed” as asserted. *See* Ans. 9–10. Instead, the

Examiner stated that the possible order of the operations in Kihira are few and that each are “equally obvious possibilities” to choose from, concluding that “both possibilities are therefore implied.” Final Act. 5; *see also* Ans. 6, 7, 10. Hence, Appellant’s arguments, premised on a theory of inherency, is misplaced.

Appellant also contends that “Kihira does not explicitly disclose how the bent [] main shield body 51 is made.” App. Br. 12. “Appellant respectfully submits that it is equally possible that a casting process or a molding process can be used to produce the shape of the bent main shield portion 51.” App. Br. 12. We disagree with Appellant. Kihira clearly states that the cylindrical pipe 51 “is bent.” Kihira ¶ 26. Kihira does not teach that the pipe is cast or molded. In fact, the Examiner points out that if the pipe were cast or molded, “it is unclear how a core could be removed,” especially since Kihira’s item 51 “has numerous bends.” Ans. 8 (referencing Kihira Fig. 1).

The Examiner further questions the criticality of the recited order stating that once the wires are inserted, “it does not appear it would make any difference whether the terminals are attached to the wires prior to bending the pipe or after bending the pipe.” Ans. 6–7; *see also id.* at 10. In short, the Examiner states, “the order of the bending and attaching steps can be reversed without any negative consequences.” Ans. 7. Appellant disagrees, asserting that bending the pipe before or after wire insertion makes a difference affecting whether or not the wire ends are “ragged and uneven” due to “different bend radii of the wires.” Reply Br. 4. Appellant is addressing the affect bending has on the resulting wire end arrangement. The Examiner, on the other hand, is addressing the affect bending has on the

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treatment of the wire ends. Wire end location and treatment of these ends are not the same. Appellant does not explain how bending has any critical effect on the ability to treat the wire ends (whether or not the wire ends are “ragged and uneven”). Further, claim 1 recites wire insertion prior to bending and thus Appellant’s device suffers the same “ragged and uneven” result which is argued as a distinction.

Accordingly, and based on the record presented, we are not persuaded the Examiner erred in rejecting claims 1–3 as being obvious over Kihira and Masuoka.

DECISION

The Examiner’s rejection of claims 1–3 under 35 U.S.C. § 103(a) 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