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Table with columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO., EXAMINER, ART UNIT, PAPER NUMBER, NOTIFICATION DATE, DELIVERY MODE. Includes application details for George Psipsikas and examiner Matzek, Matthew D.

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):

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Art Unit: 1786

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 3 recites particular components and their weight percentages within the metal oxide and inorganic material composition, however, the use of the limitation “the percentage being 100%” makes the claim confusing. If Applicant's intent is to say that the weight of the particular components add to 100%, the claim should be re-written without a chart and ended with a period.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

3. Claims 1, 4, 6, and 11 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Hu (US 2013/0143024 A1).

Hu discloses a laminated cloth for exercise attire comprising a pair of cloth layers adhesively bonded to an interior rubber layer comprising ceramic powders. Hu abstract, ¶ 1. The rubber layer comprises styrene butadiene rubber or a thermoplastic elastomer. *Id.* ¶ 18. The ceramic powder serves to absorb heat from the body and emit far-infrared rays to improve blood circulation. *Id.* 2.

4. Claims 1, 2, 4–6, 8, 9, and 11 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Ishii (US 2003/0068949 A1).

Ishii discloses a heat-retaining fiber structure used to make clothing comprising a cloth layer having a moisture/heat release control capability laminated with a cloth layer having water molecule adsorption/heat release control capability. Ishii abstract. Heat

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reserving materials, such as, ceramics produced from inorganic compounds (i.e., alumina, zirconia, silica, and magnesia) may be added to the cloth to enhance its heat-retaining effect by dipping a garment in a bath containing the ceramic powder and a silicon-based or water-based, hydrophilic polyurethane resin. *Id.* ¶¶ 116, 119, 167, 222–227.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 102(a)(1) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Ishii.

Although Ishii does not explicitly teach the claimed feature having a level of emissivity of at least 95% in the far infrared radiation between 4 and 14 microns, it is reasonable to presume that said property is inherent to Ishii. Support for said presumption is found in the use of like materials (i.e. a composite material including a polymer matrix in which particles of inorganic material capable of emitting far-infrared radiation are embedded). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of claim emission would obviously have been present one the Ishii product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80.

Claim Rejections - 35 USC § 103

6. Claim 7 is rejected under 35 U.S.C. 103 as being unpatentable over Ishii.

The ceramic powder added to the cloth layer in Ishii has the specific purpose of enhancing the cloth's heat-retaining effect. The modified cloth layer is specifically designed as heat-retaining bedding and cold-protecting shoes. Ishii ¶ 1. Accordingly, it would have been obvious to the ordinarily skilled artisan to have applied the ceramic powder coating in a pattern that concentrates areas that require the most heat retention, while not including the powder in areas that do not require as much warmth.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW MATZEK whose telephone number is (571)272-5732. The examiner can normally be reached on M-F, 9-5:30.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Chriss can be reached on 571.272.7783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/MATTHEW MATZEK/
Primary Examiner, Art Unit 1786