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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GOTTFRIED ROHNER, DIETHARD BERTSCH,
and MICHAEL BROTZGE

Appeal 2019-002819
Application 12/771,873
Technology Center 3700

Before MICHAEL J. FITZPATRICK, MICHELLE R. OSINSKI, and
WILLIAM A. CAPP, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the final rejection of claims 4–7, 9–11, 13–15, and 17–19. 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(a). Appellant identifies Ivoclar Vivadent AG, as the real party in interest. Appeal Br. 3.

THE INVENTION

Appellant's invention relates to dental color keys. Spec. 1. Claim 18, reproduced below, is illustrative of the subject matter on appeal.

18. A dental color key comprising
a base body adapted to be mounted on a human tooth with
an adhesive or a clip,
at least sixteen commercial color patterns or samples of
different tooth shades arranged in a matrix on the base body,
wherein color patterns or samples similar in color are arranged
adjacent to one another,
wherein the base body is releasably mountable on a tooth to
extend into a same plane as the tooth for immediate
comparison,
wherein the color patterns or samples are supported by an
opaque or dentin material,
wherein the base body is smaller than a buccal and/or labial
surface of two teeth.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Name	Reference	Date
Graham	US 5,177,694	Jan. 5, 1993
Shima	US 5,904,481	May 18, 1999
Cruz	US 2003/0235799 A1	Dec. 25, 2003
Giorgianni	US 2004/0252303 A1	Dec. 16, 2004
Albarski	US 2010/0055638 A1	Mar. 4, 2010
Ouaknine	WO 02/086431 A1	Oct. 31, 2002
Vanini	WO 2007/034300 A1	Mar. 29, 2007
Magne, P., et al., <i>Anatomic crown width/length ratios of unworn and worn maxillary teeth in white subjects</i> , 89(5) J. Prosthet. Dent. (May 2003).		

The following rejections are before us for review:

1. Claims 4–6, 10, 11, 13–15, 18, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ouaknine, Albarski, Vanini, Magne, and Giorgianni.
2. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ouaknine, Vanini, Magne, Giorgianni, and Cruz.
3. Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ouaknine, Albarski, Vanini, Magne, Giorgianni, and Graham.
4. Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ouaknine, Albarski, Vanini, Magne, Giorgianni, and Shima.

OPINION

*Unpatentability of Claims 4–6, 10, 11, 13–15, 18, and 19
over Ouaknine, Albarski, Vanini, Magne, and Giorgianni*

Appellant argues claims 4–6, 10, 11, 13–15, 18, and 19 as a group. Appeal Br. 5–9. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2017).

The Examiner finds that Ouaknine discloses a dental color guide. Final Action 2. The Examiner relies on Albarski as disclosing color patterns arranged adjacent to one another. *Id.* at 3. The Examiner relies on Vanini as disclosing a color key that is a film smaller than a tooth surface. *Id.* The Examiner relies on Magne as disclosing dimensions of a key being smaller than a tooth surface. *Id.* at 4. The Examiner relies on Giorgianni as disclosing an opaque dentin material. *Id.* The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time

of the invention to combine the various teachings of the respective references to achieve the claimed invention. *Id.*

Appellant first argues that Ouaknine teaches away from introducing the shade guide into a patient's mouth. Appeal Br. 6. Appellant directs our attention to passages indicating that Ouaknine's key does not come into contact with a patient's saliva. *Id.* Appellant further argues that Ouaknine disparages devices that require intervention within a patient's mouth. *Id.* at 7. Appellant concludes:

One having skill in the art would not have modified the shade guide of Ouaknine such that it could be attached to the tooth, i.e., within the mouth and in contact with the patient's saliva because Ouaknine specifically teaches away from such a modification.

Id. In response, the Examiner points out that, among other things, Ouaknine teaches that its shade guide is capable of being sterilized. Ans. 2. Ouaknine expressly teaches that its shade guide can be sterilized in order to be reused. Ouaknine, machine translation, 4. The Examiner's finding that Ouaknine can be sterilized is supported by the record and obviates Appellant's teaching away argument. *Id.*

Appellant next argues that there is no motivation to combine Vanini with a traditional color shade system such as in Ouaknine or Albarski. Appeal Br. 7. Appellant argues that Vanini's color guide is a film or "phantom" that replaces traditional color systems such as Ouaknine and Albarski. *Id.* at 8. According to Appellant,

Vanini is used in conjunction with a computer, which interprets the colors of the film or phantom. *Id.* at [0015]. There is no matching of tooth color to the colors in the film or phantom of Vanini. The software is required to interpret and match colors

in the computer software to the color of the tooth. *Id.* at [0025 - 0026]. One of ordinary skill in the art would not have been led to reduce the size of the shade guide of the Ouaknine teaching to the size of the film in Vanini because the shade systems are completely different technologies, i.e., Vanini uses virtual colors for interpretation by a computer and Ouaknine uses traditional shade guide colors.

Id.

In response, the Examiner points out that Vanini is not relied on for its teaching of a color system, but only for the teaching that the color key can be sized to be smaller than two teeth. Ans. 3. Vanini teaches that its “phantom” may have any shape, such as round, elliptical, or rectangular and, that, for a round shape, a diameter of 5–6 mm is appropriate. Vanini, 2–3. Thus, the record supports the Examiner’s finding regarding the size of Vanini’s phantom.

Appellant’s argument that Vanini’s system is used with computer software to perform color matching is not persuasive. Appellant’s invention relies on human visual perception to perform color matching. Appellant did not invent human visual perception, nor does Appellant’s invention improve human visual perception. In our opinion, no more than routine skill is required to size a color key so that it is compatible with human visual perception.

Appellant next argues that a person of ordinary skill in the art would not have been motivated to modify Ouaknine with a matrix of colors as in Albarski. Appeal Br. 8. Appellant argues that Ouaknine’s color guide contains color boxes for green, bright green, magenta, and gray. *Id.*

According to Appellant:

One of ordinary skill in the art would not have been led to form a matrix with the Ouaknine shade guide . . . since one would have to account for all the additional colors (green, bright green, magenta, gray and 18 stains) which are not part of the sixteen tooth shade colors.

Id. In response, the Examiner points out that, in the proposed combination, Albarski is relied on for teaching the placement of color samples adjacent to each other. Ans. 4.

We are not persuaded that, just because Ouaknine teaches a matrix that includes additional colors, a person of ordinary skill in the art would not have considered it obvious to modify its teaching to achieve the claimed invention. A person of ordinary skill in the art would recognize that the teaching of Ouaknine is not limited to displaying one and only arrangement of colors in a matrix of rows and columns. It is common sense that familiar items may have obvious uses beyond their primary purposes, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007). Therefore, “[a] reference may be read for all that it teaches, including uses beyond its primary purpose.” *In re Mouttet*, 686 F.3d 1322, 1331 (Fed. Cir. 2012), citing *KSR*, 550 U.S. at 418–421.

Finally, Appellant argues that Giorgianni teaches a metal background that would have changed the look of the colors. Appeal Br. 9. Thus, according to Appellant: “One of ordinary skill in the art would not have reached the claimed invention of being supported on a dentin material in view of Giorgianni.” *Id.*

In response, the Examiner notes that the claim language at issue can be met by either an “opaque” or a “dentin” material. Ans. 4. The Examiner states, correctly, that an opaque material is one that does not allow light to pass through or does not transmit light. *Id.* The Examiner further notes that Appellant fails to provide any evidence that the cited ceramic coated metals of Giorgianni are not opaque. *Id.*

We have considered Appellant’s remaining arguments and find them to be without merit. In view of the foregoing discussion, we determine that the Examiner’s findings of fact are supported by a preponderance of the evidence and that the Examiner’s legal conclusion of unpatentability is well-founded. Accordingly, we sustain the Examiner’s unpatentability rejection of claims 4–6, 10, 11, 13–15, 18, and 19 over Ouaknine, Albarski, Vanini, Magne, and Giorgianni.

*Unpatentability of Claims 7, 9, and 17
Over Combinations Based on Ouaknine*

Claims 7, 9, and 17 depend from claim 18. Claims App. Appellant does not argue for the separate patentability of these claims, which stand rejected as being unpatentable over Ouaknine in combination with additional references, apart from arguments that we have previously considered and found unpersuasive with respect to the rejection of claim 18. Appeal Br. 9–10. We sustain the rejections of claims 7, 9, and 17.

CONCLUSION

In summary:

Claims Rejected	§	Reference(s)	Aff'd	Rev'd
4-6, 10, 11, 13-15, 18, 19	103	Ouaknine, Albarski, Vanini, Magne, Giorgianni	4-6, 10, 11, 13-15, 18, 19	
7	103	Ouaknine, Vanini, Magne, Giorgianni, Cruz	7	
9	103	Ouaknine, Albarski, Vanini, Magne, Graham	9	
17	103	Ouaknine, Albarski, Vanini, Magne, Giorgianni, Shima	17	
Overall Outcome			4-7, 9-11, 13-15, 17-19	

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

AFFIRMED