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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* KHOSRO EZAZ-NIKPAY,  
DANIEL KOHN, HENDRICK SABERT,  
HIROMI SASAKI, and AURELIE SCHMITT

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Appeal 2019-003851  
Application 14/433,904  
Technology Center 1700

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Before MICHAEL P. COLAIANNI, GEORGE C. BEST, and  
DEBRA L. DENNETT, *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 16, 17, 36–38, and 42 of Application 14/433,904 Final Act. (September 11, 2017). We have jurisdiction under 35 U.S.C. § 6.

For the reasons set forth below, we *reverse*.

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<sup>1</sup> We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Zendegii Ltd. as the real party in interest. Appeal Br. 3.

## I. BACKGROUND

The '904 Application describes a method for rapidly dispensing beverages from the contents of a cartridge which has been inserted into a machine. Spec. ¶ 1. The '904 Application describes the cartridge as containing solid freeze-dried fruit or vegetable ingredients and/or freeze-dried fruit or vegetable juices. *Id.*

Claim 16 is representative of the '904 Application's claims and is reproduced below from the Claims Appendix of the Appeal Brief (emphasis added).

16. A method of producing a beverage, the method comprising:

breaking a seal of a sealed flexible, expandable cartridge having an exterior and an interior, wherein the cartridge comprises loose, dry freeze-dried fruit and/or vegetable ingredients in its interior;

*introducing a charge of chilled water into the interior of the cartridge; and acting with a kneading mechanism on or from the exterior of the cartridge to apply shear force to the freeze-dried fruit and/or vegetable ingredients, the cartridge being expandable so that the freeze-dried fruit and/or vegetable ingredients are able to be agitated vigorously in the interior of the cartridge and to contact the freeze-dried fruit and/or vegetable ingredients with the water under low hydrostatic pressure applied by the kneading mechanism, which is less than 10 kiloPascal, to produce a beverage reconstituted from the freeze dried fruit and/or vegetable ingredients.*

Appeal Br. 15 (emphasis added).

## II. REJECTIONS

On appeal, the Examiner maintains the following rejections:<sup>2</sup>

1. Claims 16, 36, and 42 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Colston,<sup>3</sup> Coffee Detective,<sup>4</sup> Peterson,<sup>5</sup> and MacMahon.<sup>6</sup> Final Act. 3–6.
2. Claim 17 is rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and Rapparini.<sup>7</sup> Final Act. 6–7.
3. Claims 37 and 38 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and Hedenburg.<sup>8</sup> Final Act. 7–8.

## III. DISCUSSION

Appellant’s initial brief argues for reversal of all of the rejections at issue based upon the limitations in claim 16. *See* Appeal Br. 5–14. We, therefore, select claim 16 as representative of the claims subject to this

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<sup>2</sup> Claims 18–35 and 39–41 are withdrawn from consideration by the Examiner pursuant to 37 C.F.R § 1.42(b) as drawn to a non-elected invention. Final Act. 1, 2.

<sup>3</sup> US 6,805,041 B2, issued Oct. 19, 2004.

<sup>4</sup> *3 Ways to make and enjoy iced coffee drinks at home*, Coffee Detective, July 15, 2011, <http://www.coffeedetective.com/iced-coffee-drinks-at-home.html> (accessed Mar. 31, 2017) (hereinafter “Coffee Detective”).

<sup>5</sup> US 2011/0076361 A1, published Mar. 31, 2011.

<sup>6</sup> US 2009/0311384 A1, published Dec. 17, 2009.

<sup>7</sup> US 2012/0100259 A1, published Apr. 26, 2012.

<sup>8</sup> US 4,550,653, issued Nov. 5, 1985.

ground of rejection and limit our discussion to this claim. 37 C.F.R. § 41.37(c)(1)(iv). For the reasons set forth below, we do not reach Appellant's separate argument for reversal of the rejection of claim 42. Reply Br. 2.

A. *Rejection of claims 16, 36, and 42 as unpatentable over the combination of Colston, Coffee Detective, Peterson, and MacMahon.*

According to Appellant, the combination of Colston, Coffee Detective, Peterson, and MacMahon does not describe or suggest the following element of claim 16: "acting with a kneading mechanism . . . to contact the freeze-dried fruit and/or vegetable ingredients with []water under low hydrostatic pressure applied by the kneading mechanism, which is less than 10 kiloPascal." Appeal Br. 7.

There is no dispute that a low hydrostatic pressure of about 10 kiloPascal is equivalent to about 0.1 bar gauge. Final Act 4; Appeal Br. 8.

Appellant argues that Colston "is deficient with respect to applying low hydrostatic pressure[,] which is less than 10 kilo[P]ascal, via a kneading mechanism." Appeal Br. 8. Appellant contends that Colston is distinguished from claim 16 because the reference "actually teaches . . . that the aqueous fluid is injected at a pressure from about 0.1 to about 16 bar gauge." *Id.*; see Colston 7:35–38. In other words, Appellant argues that Colston's low hydrostatic pressure applied by fluid injection does not describe or suggest the "low hydrostatic pressure applied by the kneading mechanism" of claim 16. Appeal Br. 7–8.

The Examiner responds that "Colston teaches that low pressures beginning at about 0.1 bar gauge w[ere] well known and conventional to use in making beverages at the time of the invention." Answer 13 (the Examiner

found that Colston teaches “using low pressure brewing and that the pressures used can be from about 0.1 to about 16 bar gauge”) (citing Colston 3:9–11; 7:35–36).

The Examiner further responds by finding that Peterson describes a suitable cartridge pressure range of 1–2 psi, which “overlaps the claimed pressure range of less than 10 kilo[P]ascal.” Answer 16 (citing Peterson ¶ 48); *see also* Answer 17. The Examiner concludes that because “Colston, Coffee Detective, Peterson, and MacMahon teach[] that a variety of pressures and temperature, including ambient and/or near freezing temperatures, and *low pressures, e.g.,[] 1–2 psi*, were suitable conditions for making beverages from a flexible cartridge,” the applied prior art “reasonably teaches the claimed limitations” (Answer 17–18) (emphasis added).

We determine that the Examiner has not provided adequate reasoning to rebut Appellant’s arguments. In particular, the Examiner does not provide any evidence or explanation of why the low hydrostatic pressure *applied by fluid injection* would have described or suggested use of Colston’s kneading mechanism to apply similarly low, or even lower, pressure. *Compare* Colston 7:35–36; Peterson ¶ 48 *with* Colston 14:22–31; Fig. 4. *See also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”).

To the extent that the Examiner found that Colston’s apparatus “is adaptable to carry out . . . low pressure beverage brewing” (Colston 3:9–11), Answer 13, the Examiner has not made any findings showing that Colston’s kneading mechanism is adaptable to apply hydrostatic pressure less than 10

kiloPascal. Evidence in the record thus provides an insufficient nexus between low hydrostatic pressures, which are applied by fluid injection, and Colston's kneading mechanism to "agitate the contents of" a cartridge "by oscillating or peristaltic pumping of the" cartridge's membrane. Colston 14:30–31; *see, e.g.*, Final Act 12–13. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.").

In the absence of a reasoned explanation why the ordinarily skilled artisan would have used Colston's kneading mechanism to apply low hydrostatic pressure conventionally associated with liquid injection, we infer that the Examiner has engaged in impermissible hindsight in concluding that the applied prior art renders claim 16 obvious. *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998) ("hindsight" is inferred when the specific understanding or principal within the knowledge of one of ordinary skill in the art leading to the modification of the prior art in order to arrive at appellant's claimed invention has not been explained).

In view of the foregoing, we determine that the Examiner reversibly erred in rejecting claim 16 as unpatentable over the combination of Colston, Coffee Detective, Peterson, and MacMahon. Accordingly, we also reverse the rejection of claims 36 and 42, which depend from claim 16.

*B. Rejection of claim 17 as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and Rapparini.*

Appellant argues that the rejection of claim 17 as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and

Rapparini should be reversed because the Examiner has not established a prima facie case of obviousness with respect to independent claim 16.

Appeal Br. 13 (“*Rapparini* does not cure the deficiencies of the collective teachings of” Colston, Peterson, and MacMahon). As discussed above, we have reversed the rejection of claim 16. We, therefore, also reverse the rejection of claim 17.

*C. Rejection of claims 37 and 38 as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and Hedenberg.*

Appellant essentially argues that the rejection of claims 37 and 38 as unpatentable over the combination of Colston, Coffee Detective, Peterson, MacMahon, and Hedenberg should be reversed because the Examiner has not established a prima facie case of obviousness with respect to independent claim 16. *Id.* (“[T]he rejection presents no sound rationale for modifying *Colston* in view of” Coffee Detective, Peterson, MacMahon, and Hedenberg “to arrive at the presently claimed invention”). As discussed above, we have reversed the rejection of claim 16. We, therefore, also reverse the rejection of claims 37 and 38.

#### IV. CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
16, 36, 42	103(a)	Colston, Coffee Detective, Peterson, MacMahon		16, 36, 42
17	103(a)	Colston, Coffee Detective, Peterson, MacMahon, Rapparini		17

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<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
37, 38	103(a)	Colston, Coffee Detective, Peterson, MacMahon, Hedenberg		37, 38
<b>Overall Outcome</b>				16, 17, 36-38, 42

REVERSED