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466	7590	09/28/2020	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD 11TH FLOOR ARLINGTON, VA 22203			HURST, JONATHAN M	
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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* OLIVIER MAGNIN, LAURENT DAMONNEVILLE, and  
SERGE CHAMPSEIX

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Appeal 2019-005220  
Application 15/294,274  
Technology Center 1700

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Before JEFFREY T. SMITH, JAMES C. HOUSEL, and  
BRIAN D. RANGE, *Administrative Patent Judges*.

SMITH, *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 1–16, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

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 the real party in interest as C2 Diagnostics. Appeal Br. 2.

### STATEMENT OF THE CASE

Appellant's invention is generally directed an optical measurement method for counting and/or differentiating leucocytes in an automatic blood analysis apparatus. (Spec. 3.) Independent claim 1 is representative of the appealed subject matter and is reproduced below:

1. An optical measurement method for counting and/or differentiating leucocytes in an automatic blood analysis apparatus, comprising steps of:

- using a blood sample, the dilution rate of which is between 1/100 and 1/500;
- injecting a non-hydrofocused blood sample using a tank, the section of which having at least one transverse dimension comprised between 1 and 5 millimetres,
- injecting the blood sample flow with a diameter greater than 50  $\mu\text{m}$  using an injector, of the tank, having an outlet orifice with a diameter of 50-150  $\mu\text{m}$ ;
- illuminating the blood sample flow circulating in the optical tank along an injection axis by using a light source having an electroluminescent diode, which emits a light beam along an optical axis substantially transversely to said injection axis,
- focusing said light beam on the blood sample flow; and
- measuring light originating from the optical tank after interception by a blood cell of the blood sample,
- detecting light issued from the electroluminescent diode and diffracted by said blood cell according to narrow angles, smaller than 10 degrees, relative to the optical axis.

Claims Appendix (emphasis added).

The following rejections are presented for our review: <sup>2</sup>

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<sup>2</sup> The complete statement of the rejections on appeal appear in the June 25, 2018 Non-Final Action. (Non-Final Act. 2–12.)

I. Claims 1–3, 6, and 9–15 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Singh (US 2004/0022685 A1; Feb. 5, 2004), Valet (US 4,751,188; June 14, 1988), Hoffman (US 6,813,017 B1; Nov. 2, 2004), Fritz ( US 2003/0002027 A1; Jan. 2, 2003), and Johnson (US 6,256,096 B1; July 3, 2001).

II. Claims 4, and 5 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Singh, Valet, Hoffman, Fritz, Johnson, and further in view of Lefevre (US 5,730,941; Mar. 24, 1998).

III. Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Singh, Valet, Hoffman, Fritz, Johnson, Lefevre, and further view of Unterleitner (US 4,498,766; Feb. 12, 1985).

IV. Claim 16 is rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Singh, Valet, Hoffman, Fritz, Johnson, and further view of Tycko (US 4,735,504; Apr. 5, 1988).

#### OPINION

We consider the record to determine whether Appellant has identified reversible error in the Examiner’s rejections. *See In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections,” citing *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential)).

Appellant argues independent claim 1 clearly states that the blood sample to be analyzed is non-hydro-focused. Appellant argues the Examiner’s rejection is based on an erroneous interpretation. (Reply Br. 1–

2.) Appellant further argues none of the cited references disclose a non-hydro-focused sample at the analysis zone.

The dispositive issue for this appeal is the following:

Did the Examiner err in determining that the method of independent claim 1 is not limited to analysis of non-hydrofocused blood sample?<sup>3</sup>

We answer this question in the affirmative.

We agree with Appellant that the Examiner erred reversibly in the determination of obviousness for independent claim 1. The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). “[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 re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (quoted with approval in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

The Examiner’s rejection is premised on the analysis of hydrofocused blood samples. The Examiner states:

The examiner notes that the claims only require a step of “injecting a non-hydrofocused blood sample using a tank”. Importantly, the claims do not prohibit hydrofocusing throughout the sample flow but merely prior to injection from a tank.

(Ans. 4.)

Utilizing this interpretation, the Examiner finds Singh discloses an optical tank in which a blood sample is injected through sample inlets. The Examiner acknowledges that the blood sample is subsequently hydrofocused

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<sup>3</sup> We limit our discussion to independent claim 1, the only independent claim on appeal.

by the addition of a buffer after introduction. The Examiner specifically states:

Regarding claim 1 Singh et al. discloses an optical measurement method for counting cells in an automatic sample analysis apparatus comprising the steps of:

- using a cell sample,
- injecting a non-hydrofocused sample using a tank, the section of which having at least one transverse dimension comprised between 1 and 5 millimetres. (See Singh Fig.1 and [0055]-[0057] wherein an optical tank 1 has an inlet 2 with a transverse dimension, i.e.,] diameter, of 2 mm. Also non-hydrofocused sample fluid is injected into the tank utilizing sample inlets 4. It is noted that while **the sample may be hydro-focused focused by buffer fluids after it has been injected into the tank** the sample is a not hydro-focused prior to injection and as such a non-hydrofocused sample is injected using the inlet of the tank as is required by the claim and only after injection would/could the sample be hydrofocused.)

(Non-Final Act. 3 (emphasis added).)

Contrary to the Examiner's position, the claimed invention specifies an optical measurement method for counting and/or differentiating leucocytes in an automatic blood analysis apparatus wherein the steps describes analysis of a non-hydrofocused blood sample. The claimed invention does not describe method steps wherein the character of the blood sample is changed. In particular, claim 1 refers to "injecting a non-hydrofocused blood sample" and then later refers to "the blood sample." The recitation of "the blood sample" refers back to the "a non-hydrofocused blood sample." None of the steps indicate that "the blood sample" becomes non-hydrofocused, or is otherwise altered, at any point. Therefore, "the blood sample" remains non-hydrofocused in each step.

Accordingly, we REVERSE the Examiner's prior art rejections of claims 1–8 under 35 U.S.C. § 103(a) for the reasons the Appellant presents and we give above.

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–3, 6, 9–15	103(a)	Singh, Valet, Hoffman, Fritz, Johnson		1–3, 6, 9– 15
4, 5	103(a)	Singh, Valet, Hoffman, Fritz, Johnson, Lefevre		4, 5
7, 8	103(a)	Singh, Valet, Hoffman, Fritz, Johnson, Lefevre, Unterleitner		7, 8
16	103(a)	Singh, Valet, Hoffman, Fritz, Johnson, Tycko		16
<b>Overall Outcome</b>				1–16

REVERSED