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34282	7590	01/31/2020	EXAMINER	
QUARLES & BRADY LLP (TUC)			WEHBE, ANNE MARIE SABRINA	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID T. HARRIS, TOM C. TSANG, XIANGHUI HE,
BRIAN L. PIPES, MICHAEL E. PENNINGTON, and
LINDA C. MEADE-TOLLIN

Appeal 2018-009066
Application 14/315,039
Technology Center 1600

Before ULRIKE W. JENKS, TIMOTHY G. MAJORS, and
MICHAEL A. VALEK, *Administrative Patent Judges*.

JENKS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims as obvious. 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 the real party in interest as record, Arizona Board of Regents on behalf of The University of Arizona. Appeal Br. 1.

STATEMENT OF THE CASE

Claims 1–4 are on appeal, and can be found in the Claims Appendix of the Appeal Brief. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A composition comprising, an antibody against mammalian ubiquitin in a pharmaceutically acceptable carrier and one or more viable human tumor cells.

Appeal Br. A-1.

REFERENCE

The prior art relied upon by Examiner is:

Name	Reference	Date
Varki et al. (“Varki”)	US 2007/0021378 A1	Jan. 25, 2007
Läubli et al., <i>L-Selectin Facilitation of Metastasis Involves Temporal Induction of Fut7-Dependent Ligands at Sites of Tumor Cell Arrest</i> , 66 <i>Cancer Res.</i> 1536–42 (2006) (“Läubli”)		
St. John et al., <i>Expression Cloning of a Lymphocyte Homing Receptor cDNA: Ubiquitin Is the Reactive Species</i> , 231 <i>Science</i> 845–50 (1986) (“St. John”)		

REJECTION

Appellant requests review of the rejection of claims 1–4 under pre-AIA 35 U.C.C. §103(a) over Läubli in view of St. John and Varki.

ANALYSIS

Upon consideration of the evidence on this record and each of Appellant’s contentions, we find that the preponderance of evidence on this record supports Examiner’s conclusions that the subject matter of Appellant’s claims 1–4 are unpatentable over the combination of Läubli, St. John, and Varki. Accordingly, we affirm Examiner’s rejections of each

of these claims based on the findings, and for the reasons set forth in the Answer and Final Office Action mailed August 7, 2017, which we incorporate herein and adopt by reference.

For emphasis only, we provide the following: We are not persuaded by Appellant's contention that "a reasonable likelihood of success remains elusive when considering the applicability of mouse data to humans."

Appeal Br. 5. Claim 1 requires the use of viable human tumor cells. The claim does not require treatment in a human being. The claim also does not require that the combination produce any particular effect or end result. All that is necessary to meet the claim elements is for the two components to be together in a composition (e.g., in the same vessel).

Examiner's rejection is relying on substituting the MEL 14 antibody for heparin as taught in Läubli's experiments using a mouse colon carcinoma cell line for the heparin used in Varki's experiments. *See* Ans. 7 ("MEL-14, an anti-ubiquitin antibody, and heparin can [both] be used to inhibit metastases of colon carcinomas."); *see id.* at 4 (heparin "is effective in inhibiting the metastasis of melanomas, and both human and mouse colon carcinomas."). On this record, there would be at least a reasonable expectation of success for Examiner's proposed substitution in the prior art experimental protocol to form the claimed composition, especially given that the claimed combination does not require achieving any a particular result with the composition. "Obviousness does not require absolute predictability of success . . . all that is required is a reasonable expectation of success." *In re Droge*, 695 F.3d 1334, 1338 (Fed. Cir. 2012) (quoting *In re Kubin*, 561 F.3d 1351, 1360 (Fed. Cir. 2009) (citing *In re O'Farrell*, 853 F.2d 894, 903–04 (Fed.Cir.1988)); *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*,

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821 F.3d 1359 (Fed. Cir. 2016) (explaining that the expectation of success issue involves a showing of “a reasonable expectation of achieving *what is claimed*”) (emphasis added).

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–4	103(a)	Läubli, St. John, Varki	1–4	

TIME PERIOD FOR RESPONSE

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

AFFIRMED