

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner,

v.

UNIVERSAL SECURE REGISTRY LLC
Patent Owner

Case IPR2018-00809
U.S. Patent No. 9,530,137

PATENT OWNER'S SUR-REPLY

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PATENT OWNER’S LIST OF EXHIBITS

Exhibit #	Description
2001	Declaration of Dr. Markus Jakobsson in Support of Patent Owner's Preliminary Response.
2002	Curriculum Vitae of Dr. Markus Jakobsson.
2003	USR Disclaimer Filed July 6, 2018.
2004	Declaration ISO Motion Pro Hac Vice Harold Barza.
2005	Declaration ISO Motion Pro Hac Vice Jordan Kaericher.
2006	U.S. Application No. 15/019,660.
2007	U.S. Application No. 11/677,490.
2008	U.S. Provisional Application No. 60/775,046.
2009	U.S. Provisional Application No. 60/812,279.
2010	Declaration of Dr. Markus Jakobsson in Support of Patent Owner's Response.
2011	Deposition Transcript of Dr. Victor John Shoup.
2012	N. Asokan, et. al, The State of the Art in Electronic Payment Systems, IEEE Computer, Vol. 30, No. 9, pp. 28-35 (IEEE Computer Society Press, Sept. 1997).
2013	M. Baddeley, Using E-Cash in the New Economy: An Economic Analysis of Micropayment Systems, J. Electronic Commerce Research, Vol. 5, No. 4, pp. 239-253 (Nov. 2004).
2014	Declaration of Dr. Markus Jakobsson ISO PO's Conditional Motion to Amend.
2015	U.S. Provisional Application No. 60/859,235.
2016	U.S. District Court for Delaware Report and Recommendation.
2017	Deposition Transcript of Dr. Markus Jakobsson.
2018	A. Juels and M. Sudan, "A Fuzzy Vault Scheme."
2019	Deposition Transcript (Rough) of Dr. Ari Juels.
2020	U.S. Patent No. 8,495,372.
2021	Declaration by Dr. Markus Jakobsson ISO Reply to Motion to Amend.

Petitioner's Reply plays fast and loose with the claim language, mischaracterizes the asserted references and this Board's Institution Decision,¹ and improperly introduces new evidence and arguments. Because Petitioner's Reply fails to remedy fatal defects in the Petition that reach every challenged claim, the Board should not find any challenged claim unpatentable.

First, Petitioner still fails to show any disclosure in the asserted references of multiple elements of the independent claims. *Second*, Petitioner fails to show that a person of ordinary skill in the art ("POSITA") would have been motivated to combine the asserted references in the manner proffered in the Petition to arrive at the independent claims. In fact, the references fundamentally differ and teach directly away from Petitioner's proposed modifications. *Third*, for additional reasons, the Petition still fails to prove that dependent claims 5, 6, and 7 would have been obvious. *Finally*, Petitioner fails to rebut Patent Owner's strong showing of secondary considerations of non-obviousness.

¹ For example, the very first line of Petitioner's Reply asserts that Patent Owner's Response ("POR") "repeats arguments that the Board already rejected" (Reply at 1), but Petitioner's assertion is clearly wrong. The Board has not rejected (or even ruled on) any of Patent Owner's substantive arguments in this proceeding—particularly not under the preponderance of evidence standard governing this proceeding.

I. THE PETITION FAILED TO SHOW THAT THE INDEPENDENT CLAIMS WOULD HAVE BEEN OBVIOUS

A. Petitioner Plays Fast and Loose With Its Analysis of the Claimed “One of More Signals” (Limitations 1[e], 1[f], 12[e], 12[f])

Both independent claims of the '137 Patent include at least one limitation requiring processing and transmitting “the one or more signals.” *See* limitations 1[f] and 12[f]. The “one or more signals” that are transmitted to the second device are “generated” earlier in the independent claims. In particular, these one or more signals must include three distinct pieces of information: (1) “the first authentication information”; (2) “an indicator of biometric authentication”; and (3) “a time varying value.” *See* limitations 1[e] and 12[e]. While Petitioner ostensibly points to three pieces of information (*i.e.*, authentication code 291, a strength of biometric match (E), and a time-varying value (T)) within the Jakobsson reference as allegedly corresponding to the three claimed pieces of information, that is where the similarities stop. Reply at 2. When viewed in the proper context of the claims as a whole, Petitioner’s mapping does not satisfy several important claim limitations.

It is undisputed that authentication code 290 in Jakobsson can take at least three alternative forms—authentication code 291, 292, or 293, depending on the inputs to the authentication function A. For example:

- authentication code 291 is constructed from K, T, and E
- authentication code 292 is constructed from K, T, E, and P

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