

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.,

Petitioner,

v.

UNIVERSAL SECURE REGISTRY, LLC,

Patent Owner.

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Case IPR2018-00809

U.S. Patent No. 9,530,137

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**PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE**

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## **I. Introduction**

USR's Patent Owner Response ("POR") repeats arguments that the Board already rejected, and fails to rebut Petitioner's showing that the challenged claims are unpatentable. First, USR mischaracterizes the teachings of the Jakobsson, Maritzen, and Niwa references. Second, USR mischaracterizes the testimony of Petitioner's expert, Dr. Shoup. Finally, USR fails to demonstrate any secondary considerations of non-obviousness whatsoever.

## **II. Argument**

### **A. USR Fails To Overcome Petitioner's Showing That The Challenged Claims Are Obvious.**

#### **1. The Petition Shows That Jakobsson Discloses The "One Or More Signals."**

As the Petition demonstrated, Jakobsson discloses the "one or more signals" limitation of claims 1 and 12. Pet., 30-34. In response, USR merely reiterates its POPR argument – already rejected by the Board (DI, 11) – that the Petition fails to adequately map the "one or more signals" and "attempts to satisfy its burden by showing that some (but not all) of the three types of information are transmitted and processed." POR, 18-19. To the contrary, the Petition maps all "three types of information" to Jakobsson's teachings at the first mention of the limitation, and then expressly cites back to this mapping when the limitation appears in subsequent claims. See Pet., 33, 36-37, 51-52. Ex-1128, Shoup-Decl., ¶12; Ex-1130, Juels-Decl., ¶¶44-45.

As Petitioner explained for 1[e] (the first mention of the “one or more signals” limitation): “Jakobsson discloses that the first processor is configured to generate an authentication code (e.g., authentication code 292) [**one or more signals**] including a first authentication code (e.g., authentication code 291) [**first authentication information**], a strength of a biometric match (E) [**indicator of biometric authentication**], and a time-varying value (T) [**time-varying value**].” Pet., 33. Ex-1128, Shoup-Decl., ¶13; Ex-1130, Juels-Decl., ¶¶44-45.

Although limitation 1[f] does not require that the authentication code include all three pieces of information, Petitioner expressly incorporated its analysis for limitation 1[e] into its analysis for limitation 1[f]. Pet., 34 (*see* internal citation to Section IX.A.1.vii). Petitioner’s analysis for limitation 1[f] shows that the same authentication code discussed in limitation 1[e] (which includes all three pieces of information) is transmitted to the verifier. Ex-1128, Shoup-Decl., ¶14.

Similarly, limitation 1[h] requires a second device “configured to provide the enablement signal indicating that the second device approved the transaction based on use of the one or more signals.” ’137 patent, claim 1. Petitioner showed that Jakobsson discloses the “one or more signals” recited in limitation 1[h] (Pet., 36-38), and USR’s argument (POR, 20) fails because Petitioner’s analysis under 1[e] clearly shows that an authentication code can comprise a first authentication information, a strength of a biometric match, and a time varying value. Thus, if a

second device approves the transaction based on the same authentication code (as shown in Petitioner’s analysis for limitation 1[h]), then the second device also approves the transaction based on an authentication code that includes constituent elements used to derive that authentication code. Ex-1128, Shoup-Decl., ¶15.

**2. USR Erroneously Asserts That Jakobsson’s Combination Function Can Only Be A One-Way Function.**

For three reasons, USR is incorrect to suggest that Jakobsson’s combination function is only a one-way function that transforms the inputs into a “unitary authentication code” and does not “include” the separate values input into the combination function. POR, 22. Ex-1128, Shoup-Decl., ¶16; Ex-1130, Juels-Decl., ¶¶39-43.

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