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Etchegoyen

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(54) **SYSTEM AND METHOD FOR DEVICE AUTHENTICATION WITH BUILT-IN TOLERANCE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 133 days.

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(65) **Prior Publication Data**

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Related U.S. Application Data

(57) **ABSTRACT**

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H04L 29/06 (2006.01)

(52) **U.S. Cl.** **726/4**; 726/1; 726/2; 726/3; 726/16; 726/17; 726/21; 726/26; 726/27; 726/30; 713/168; 713/176; 713/177; 713/180; 713/187; 709/217; 709/219; 709/224; 709/225; 709/229

(58) **Field of Classification Search** 726/1-4, 726/16-21, 22-30; 713/168-170, 180-187; 709/217-219, 223-229

See application file for complete search history.

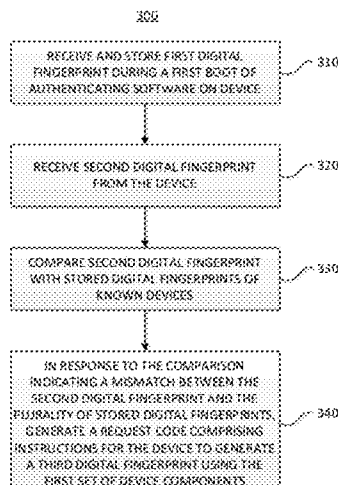
A system for building tolerance into authentication of a computing device includes a means for executing, from a computer-readable medium, computer-implementable steps of: (a) receiving and storing a first digital fingerprint of the device during a first boot of an authenticating software on the device, the first digital fingerprint based on a first set of device components, (b) receiving a second digital fingerprint from the device at a subsequent time, (c) comparing the second digital fingerprint with a plurality of stored digital fingerprints of known devices, (d) in response to the comparison indicating a mismatch between the second digital fingerprint and the plurality of stored digital fingerprints, generating a request code comprising instructions for the device to generate a third digital fingerprint using the first set of device components, (e) sending the request code to the remote device, (f) receiving the third digital fingerprint from the remote device in response to the request code, and (g) authenticating the device based on a comparison of the first and third digital fingerprints.

6 Claims, 7 Drawing Sheets

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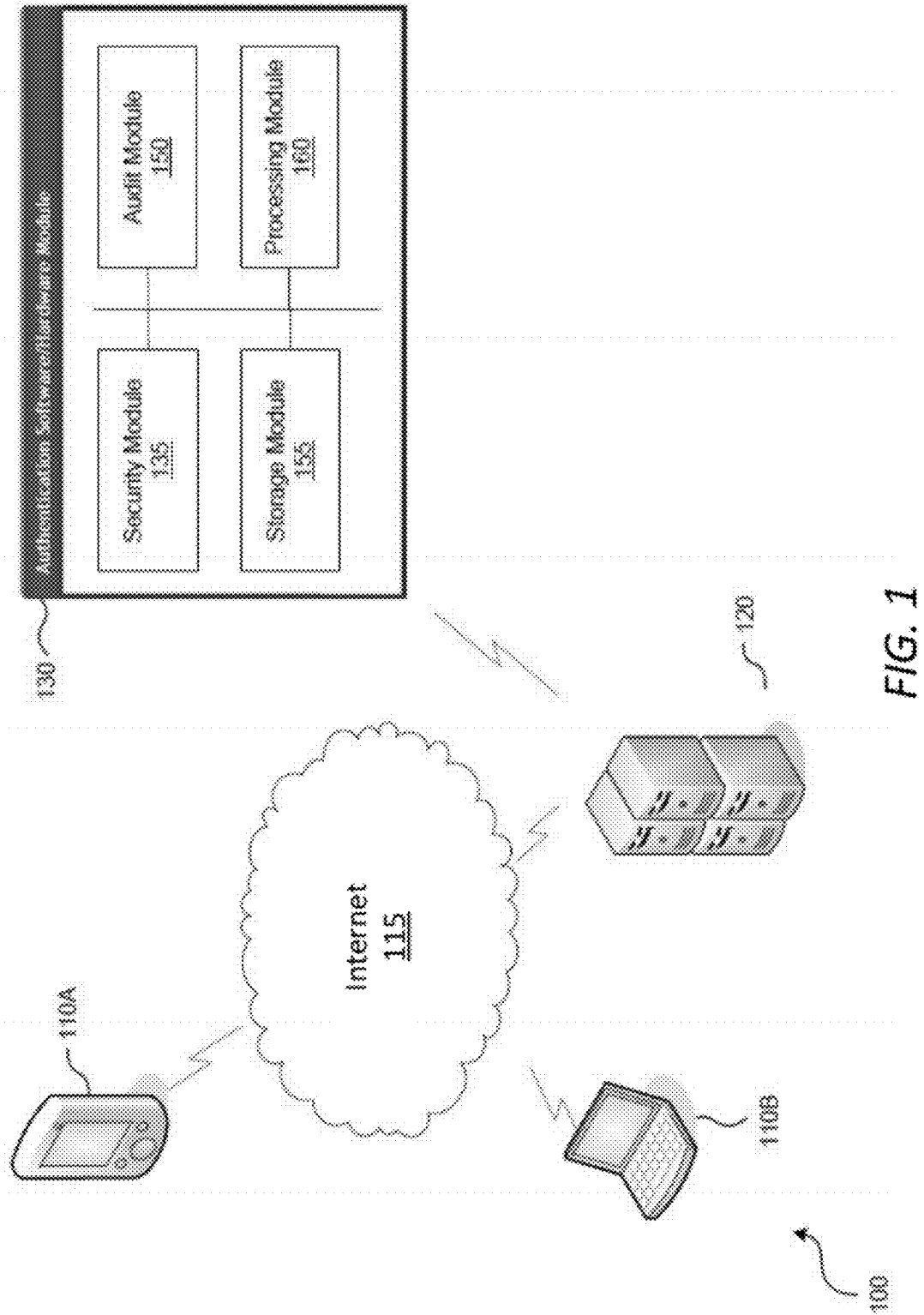


FIG. 1

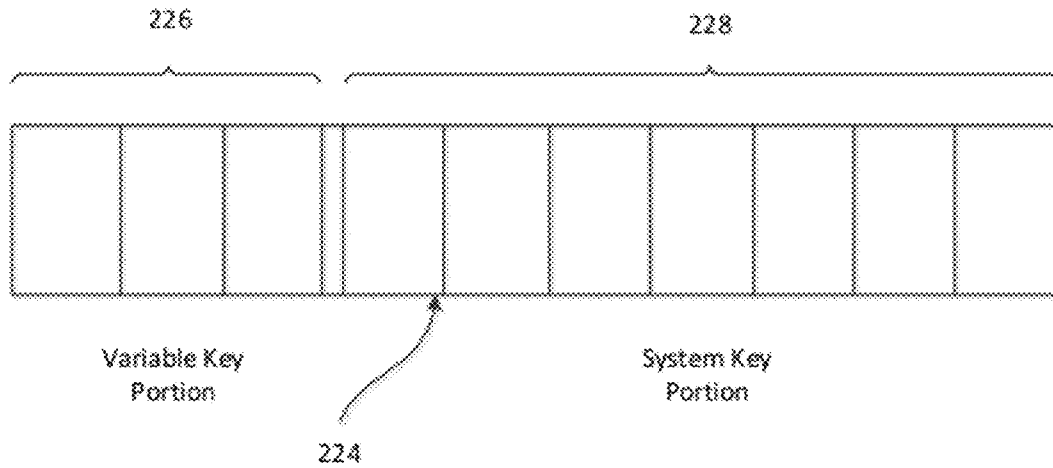


FIG. 2

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