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Pesonen

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(54) **METHOD FOR ISSUER AND CHIP SPECIFIC DIVERSIFICATION**

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(73) Assignee: **Nokia Corporation**, Espoo (FI)

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(51) **Int. Cl.**
G06K 19/06 (2006.01)

(52) **U.S. Cl.** **235/492**; 235/472.02

(58) **Field of Classification Search** 235/492, 235/472.02, 487; 713/168, 169, 172, 173; 455/410, 411, 418, 419
See application file for complete search history.

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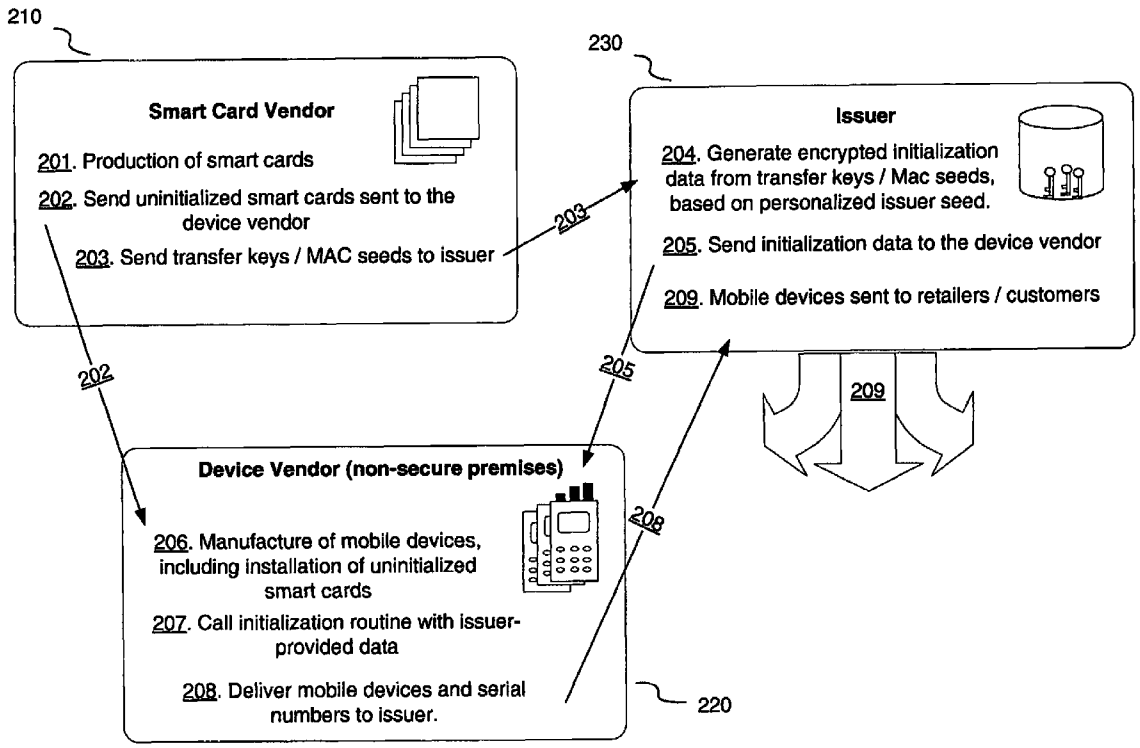
(57) **ABSTRACT**

A system and method for initializing secure elements for use in mobile devices. A mobile device manufacturer embeds uninitialized secure elements into mobile devices. An issuer-specific seed value is securely passed into an initialization routine in the operating system of the secure element. The initialization routine diversifies the initial root keys on the secure element with the issuer seed and the unique chip serial number to create master and chip keys for use in secure communications between the issuer and the mobile device user.

45 Claims, 7 Drawing Sheets



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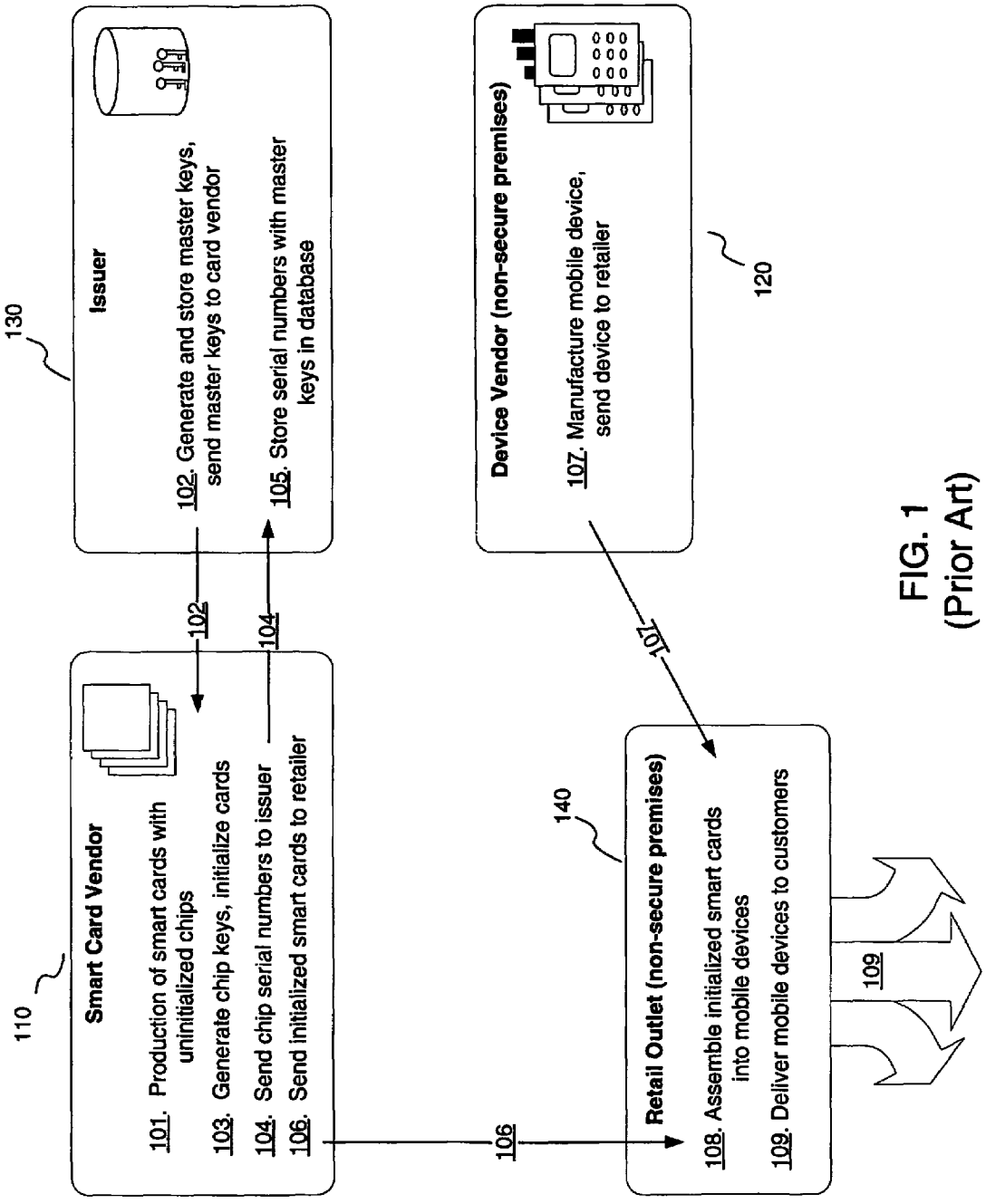

FIG. 1
(Prior Art)

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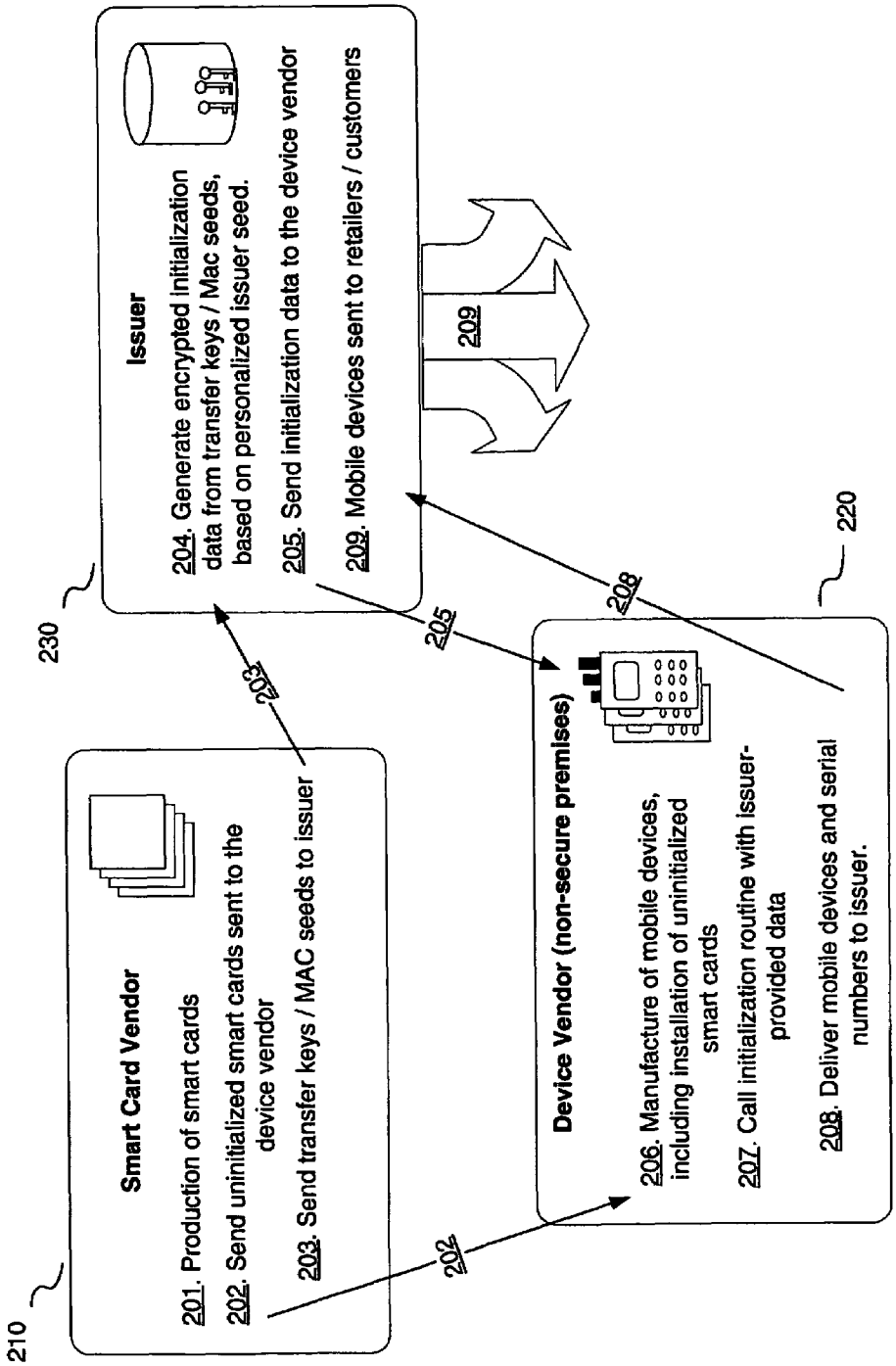

FIG. 2

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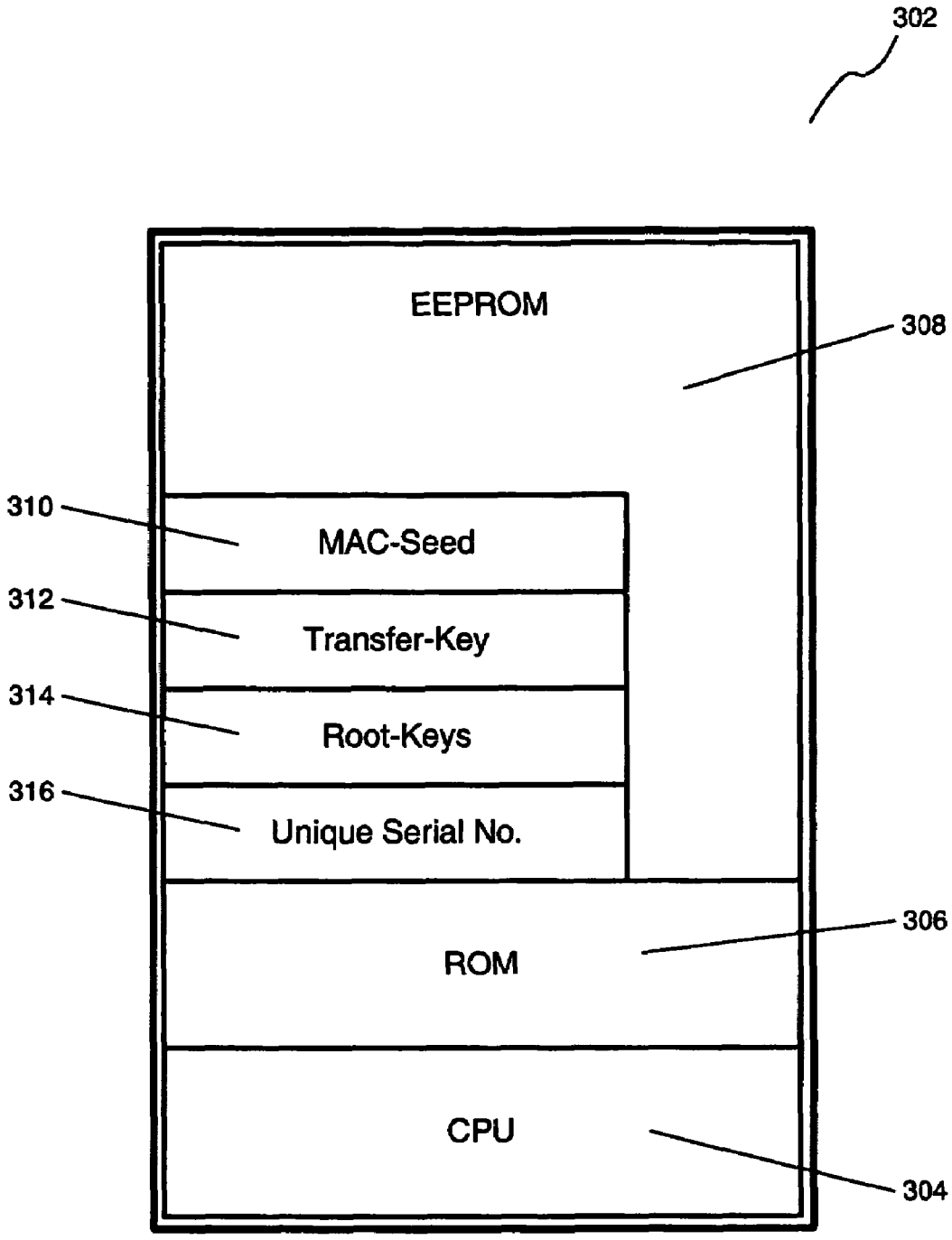

FIG. 3

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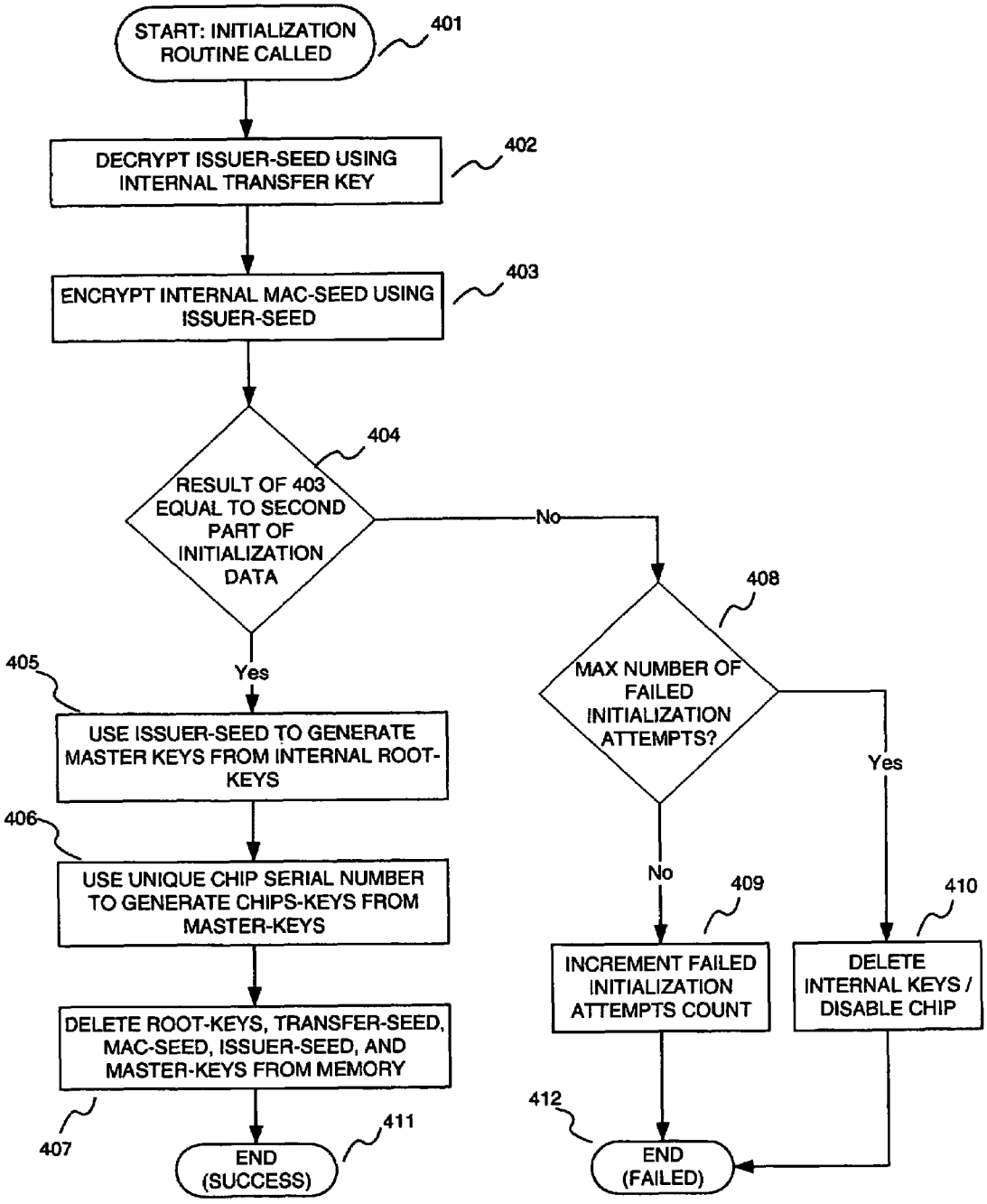

FIG. 4

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