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## (12) United States Patent

#### Fox et al.

#### (54) GUMP: GRAND UNIFIED META-PROTOCOL FOR SIMPLE STANDARDS-BASED ELECTRONIC COMMERCE TRANSACTIONS

- (75) Inventors: Barbara L. Fox, Seattle, WA (US);
  Brian A. LaMacchia, Seattle, WA (US);
  Brian C. Beckman, Newcastle, WA (US)
- (73) Assignee: Microsoft Corporation, Redmond, WA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 812 days.
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- (51) Int. Cl.
- **G06F 17/60** (2006.01)
- (52) U.S. Cl. ..... 705/26; 705/76

See application file for complete search history.

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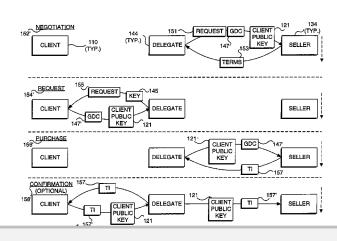
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Primary Examiner—James W. Myhre (74) Attorney, Agent, or Firm—Ronald M. Anderson

#### (57) ABSTRACT

A method for facilitating two-party electronic commerce transactions between trading partners on an unsecure network, such as the Internet. In one example, a client makes application for registration by a financial institution in which the client has one or more accounts. The client submits satisfactory proof of identity and a public key portion for a digital signature to the financial institution. The financial institution may provide the client a one time secret by a secure route, such as conventional mail, which can then be used by the client to show proof of its identity. The financial institution authenticates the one time secret and combines it with the client's public key in a GUMP Relationship Certificate (GRC), which it issues to the client over the network. Once issued, the GRC can be used by the client to authenticate its right to access its account(s) or other products or services at the financial institution and when conducting other electronic transactions over the network. The client digitally signs any such transaction to authenticate its right to conduct the transaction. A delegate may be enlisted by the client to negotiate the purchase of goods from a seller or for other purposes, using a GUMP Delegate Certificate. The concept can be extended to other three party transactions, such as issuing an electronic Letter of Credit (LOC).

#### 25 Claims, 14 Drawing Sheets



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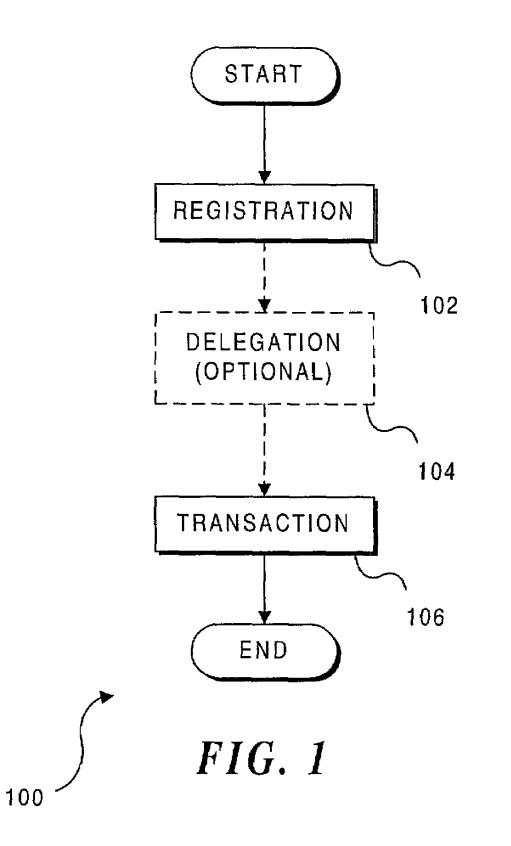
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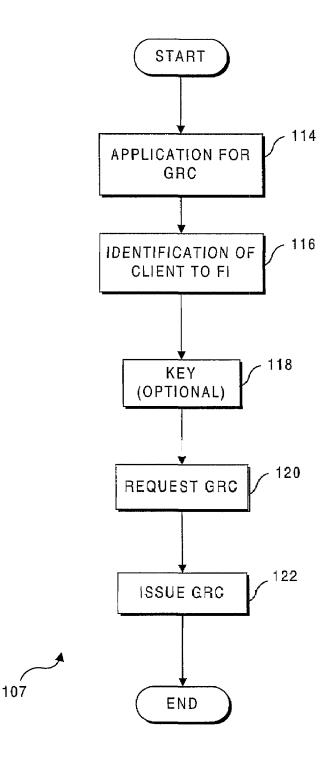
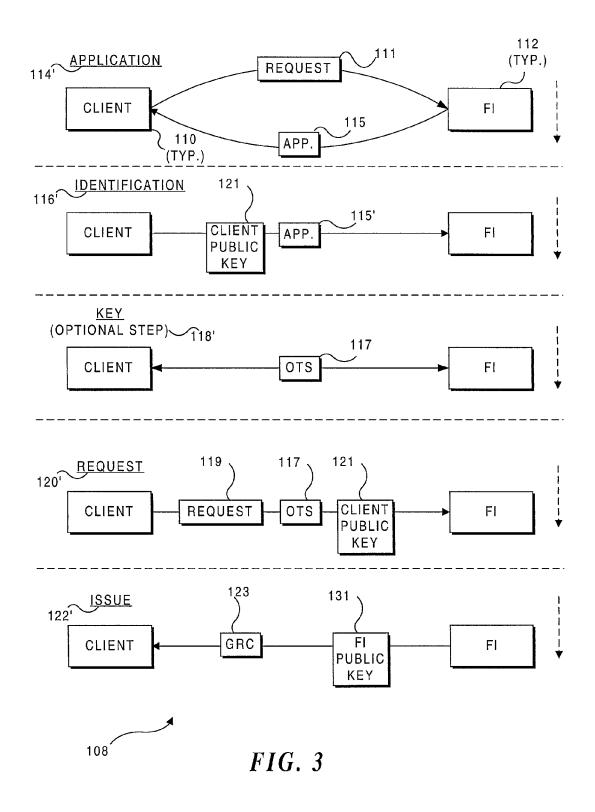


FIG. 2

Α



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