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Asghari-Kamrani et al.

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(54) **DIRECT AUTHENTICATION SYSTEM AND METHOD VIA TRUSTED AUTHENTICATORS**

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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 548 days.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**
H04L 29/06 (2006.01)
G06Q 20/00 (2006.01)

(52) **U.S. Cl.** **713/168**; 705/74; 705/78; 713/184

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See application file for complete search history.

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(57) **ABSTRACT**

Fraud and identity theft are enabled by two faulty assumptions about the way that the identity of a person is verified in our society. The first is that someone who demonstrates knowledge of certain items of personal or financial information about a particular person is presumed to be that person. The second assumption, which gives rise to the first assumption, is that these items of information can be kept confidential. Because fraudsters and identity thieves often seek to use their victim's personal and financial information, this invention proposes a direct authentication system and method that does not depend on these assumptions. The proposed method enables businesses to determine whether the customer is truly the person who he says he is by adopting a new "two-factor" authentication technique and authenticating customer's identity utilizing customer's trusted authenticator. A customer's trusted authenticator can be found within the financial services community; in particular, a bank or other financial institution with whom the customer has a trusted relationship, such as a bank account.

52 Claims, 4 Drawing Sheets
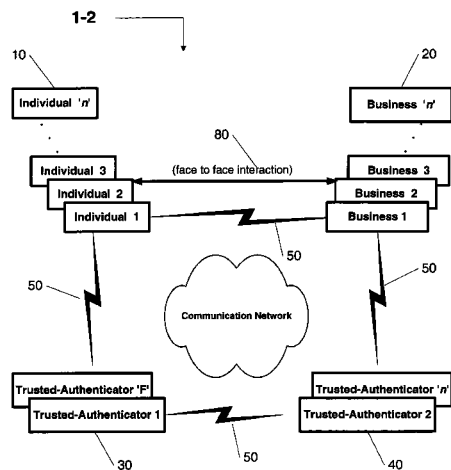
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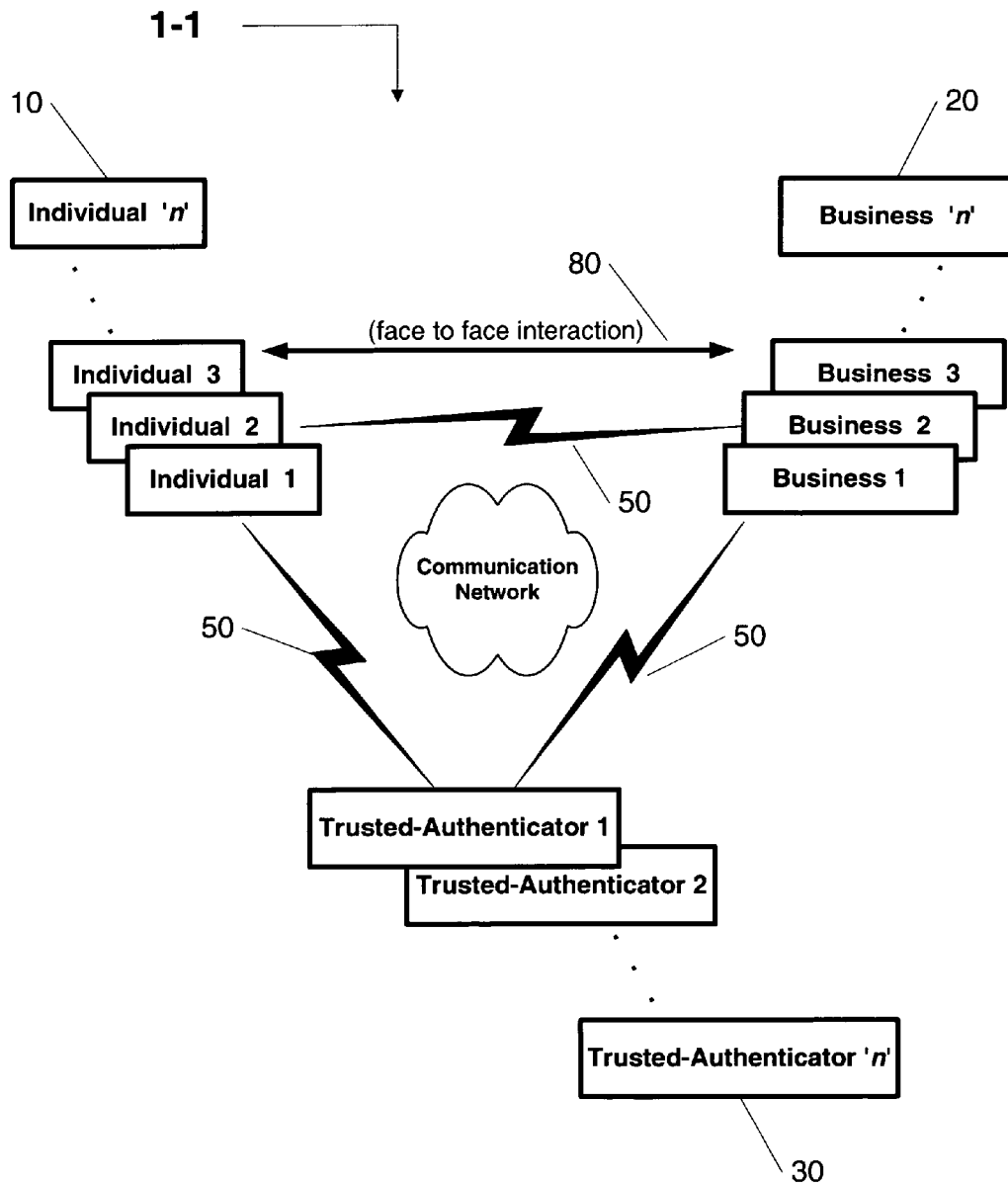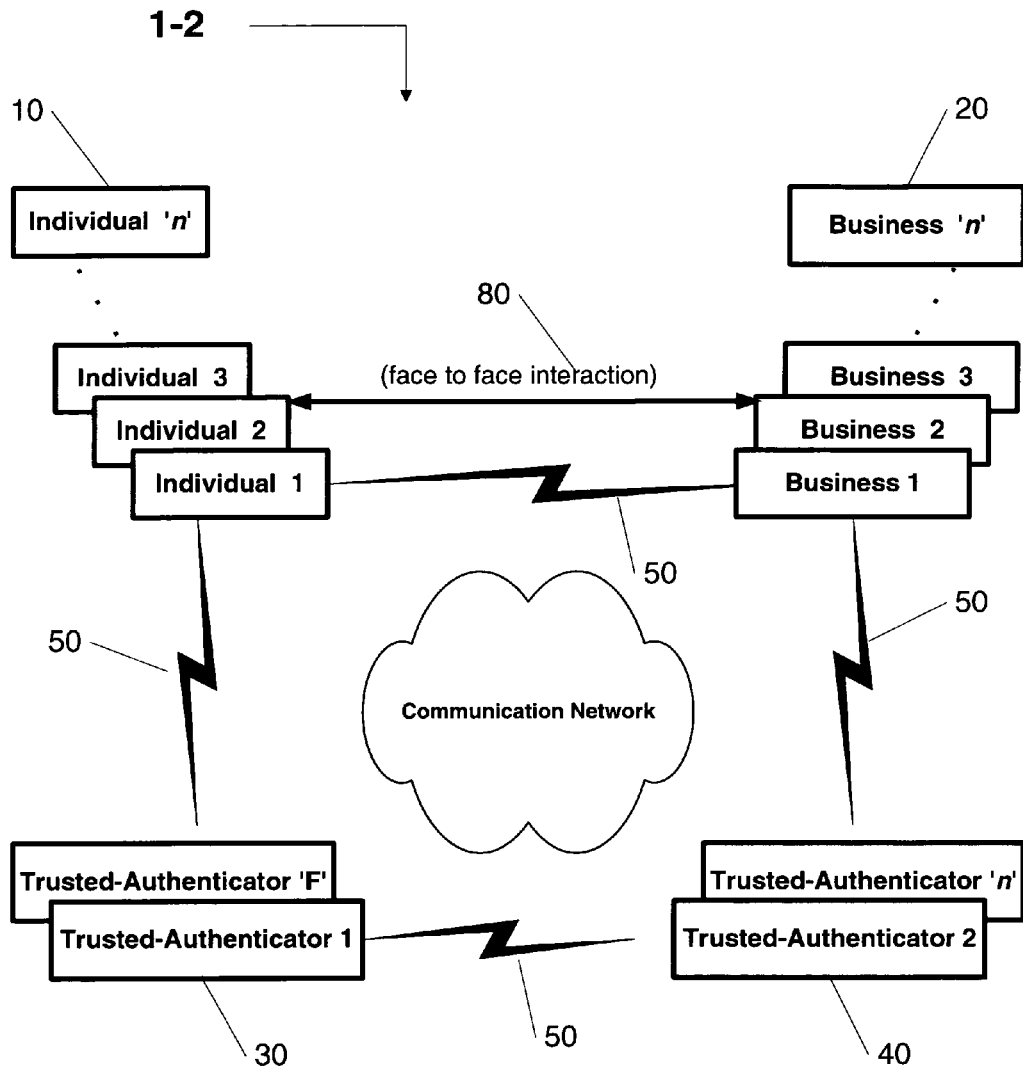
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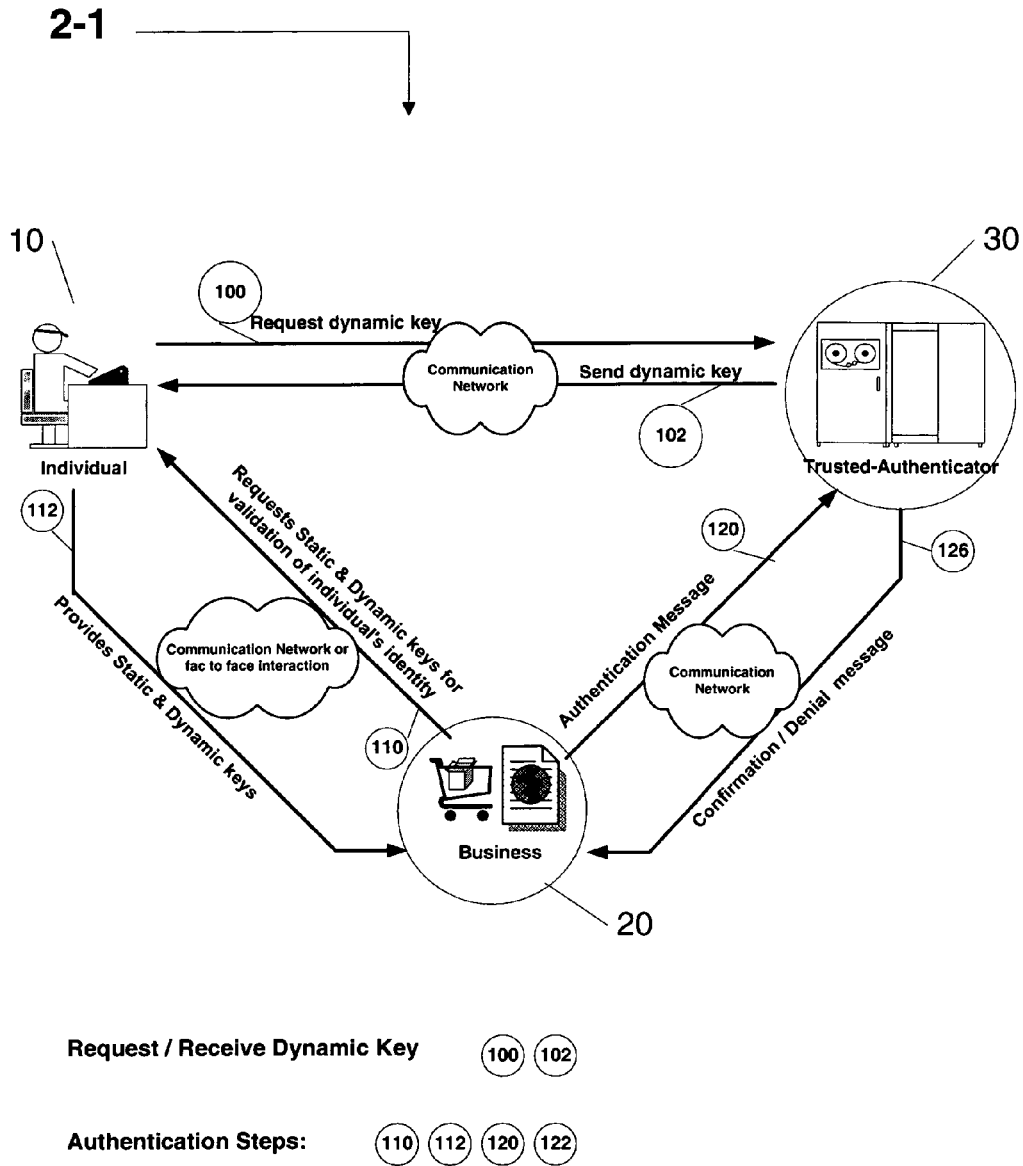| Individual 'n' |

20

| Business 'n' |

80

(face to face interaction)

| Individual 3 |
| Individual 2 |
| Individual 1 |

| Business 3 |
| Business 2 |
| Business 1 |

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Communication Network

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| Trusted-Authenticator 1 |
| Trusted-Authenticator 2 |

| Trusted-Authenticator 'n' |

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Figure 1a

1-2

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| Individual 'n' |

20

| Business 'n' |

80

| Individual 3 |

(face to face interaction)

| Business 3 |

| Individual 2 |

| Business 2 |

| Individual 1 |

| Business 1 |

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Communication Network

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| Trusted-Authenticator 'F' |

| Trusted-Authenticator 'n' |

| Trusted-Authenticator 1 |

| Trusted-Authenticator 2 |

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Figure 1b

2-1

Figure 2a

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