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(71) Applicant: VISA INTERNATIONAL SERVICE
ASSOCIATION [US/US]; P.O. Box 8999, San Francisco,
California 94128 (US).

(72) Inventors: HUI, Vanessa, Tay Jing; Visa International
Service Association, P.O. Box 8999, San Francisco, Cali-
fornia 94128 (US). NGOC, Nguyen, Thuy; Visa Interna-
tional Service Association, P.O. Box 8999, San Francisco,
California 94128 (US). ANH, Nguyen, Thi Tu; Visa Inter-
national Service Association, P.O. Box 8999, San Francis-
co, California 94128 (US). AKHTAR, Lubna; Visa Inter-
national Service Association, P.O. Box 8999, San Francis-
co, California 94128 (US).

(74) Agent: PREPELKA, Nathan, J. et al.; The Webb Law
Firm, One Gateway Center, 420 Ft. Duquesne Blvd., Suite
1200, Pittsburgh, Pennsylvania 15222 (US).

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(54) Title: METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR IDENTIFYING PROPENSITIES USING
MACHINE-LEARNING MODELS

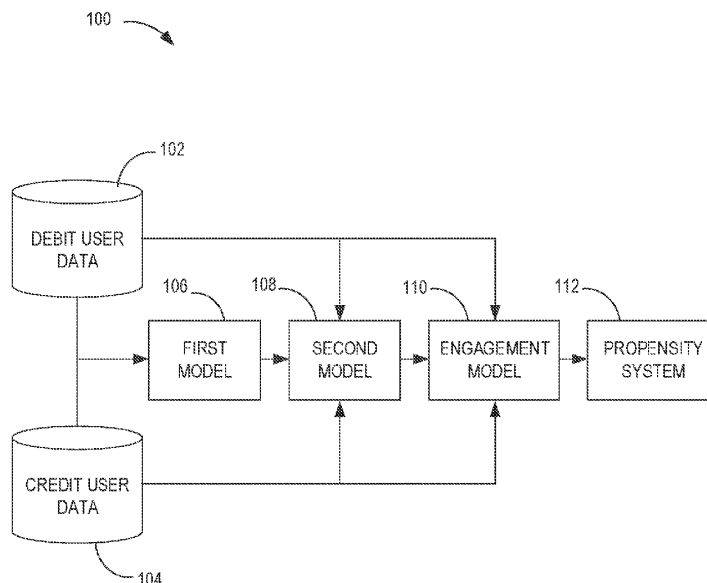


FIG. 1

(57) Abstract: The method may include inputting a first set of data into a first model; for each user in the second group, generating a first similarity score; generating a relevance score for each parameter; determining a subset of parameters based on relevance; inputting the subset of parameters, a second set of data, and a third set of data into a second model; generating a space-partitioning data structure based on the second set of data; for each user in the first group, determining a feature distance between a representation of the user in the first group and a representation of a user in the second group based on the third set of data and the space-partitioning data structure; for each user in the second group, generating a second similarity score; and for each user in the second group, generating an overall similarity score.

[Continued on next page]

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