

SYSTEMS AND METHODS FOR LOCATING MERCHANT TERMINALS BASED ON TRANSACTION DATA

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to and the benefit of the filing date of
5 U.S. Application Serial No. 14/862,704, filed September 23, 2015, which is hereby
incorporated by reference in its entirety.

FIELD

The present disclosure generally relates to systems and methods for use
10 in locating one or more merchant terminals based on transaction data, for example, for
purchase transactions made at the terminals, and also based on location data
associated with consumers making the transactions.

BACKGROUND

15 This section provides background information related to the present
disclosure which is not necessarily prior art.

Merchants often offer products (*e.g.*, goods and services, etc.) for sale
to consumers. The products may be purchased through a variety of means, including,
for example payment accounts. As part of product purchases via payment accounts,
20 by consumers, data is transferred between different entities to authorize, settle and/or
clear the transactions, *i.e.*, as transaction data. In connection therewith, the
transaction data is often stored by one or more of the different entities, and
subsequently used, for a variety of purposes, including marketing, etc.

25 SUMMARY

According to a first aspect of the present disclosure, there is provided a
computer-implemented method for use in locating one or more merchant terminals,
based on transaction data, the method comprising accessing, by a computing device,
transaction data for at least one transaction between a merchant and at least one
30 consumer, the at least one transaction being at a merchant terminal and to a payment
account associated with the at least one consumer, the transaction data, for each of the
at least one transaction, including a terminal ID for the merchant terminal, a merchant

ID of the merchant, an acquirer ID for an acquirer associated with the merchant, and a temporal indicator; receiving, by the computing device, location data associated with the at least one transaction; identifying, by the computing device, a location associated with the location data as a location of the merchant terminal; and assigning,
5 by the computing device, a score to the identified location indicative of a confidence that the identified location is the actual location of the merchant terminal.

According to a second aspect of the present disclosure, there is provided a non-transitory computer readable storage media including executable instructions that, when executed by at least one processor, cause the at least one
10 processor to match transaction data for a transaction to a payment account, between a merchant and a consumer at a merchant terminal, to location data for a portable communication device associated with the consumer in real time, or near real time, upon receipt of the location data, the transaction data including a terminal ID for the merchant terminal, a merchant ID of the merchant, an acquirer ID for an acquirer
15 associated with the merchant, and a temporal indicator; and assign a score to a location, included in the location data for the portable communication device, indicative of a confidence that the location is an actual location of the merchant terminal.

According to yet another aspect of the present disclosure, there is provided a system for use in locating one or more merchant terminals based on a
20 combination of transaction data for transactions made by consumers at the merchant terminals and location data for portable communication devices associated with the consumers, the system comprising a payment network configured to process multiple transactions between consumers and a merchant made at a merchant terminal
25 associated with the merchant; an engine coupled to the payment network and configured, by executable instructions, to access transaction data from the payment network, the transaction data representative of the multiple transactions and, for each of the transactions, including a terminal ID for the merchant terminal, a merchant ID of the merchant, an acquirer ID for an acquirer associated with the merchant, and a
30 temporal indicator; access location data for a portable communication device associated with the consumer, the location data including at least one temporal indicator substantially similar to at least one of the temporal indicators of the transaction data; and assign a score to a location for the portable communication

device, included in the location data, indicative of a confidence that the location is an actual location of the merchant terminal.

DRAWINGS

5 The drawings described herein are for illustrative purposes only of selected embodiments and not all possible implementations, and are not intended to limit the scope of the present disclosure.

 FIG. 1 is a block diagram of an exemplary system of the present disclosure suitable for use in locating merchant terminals based on transaction data for
10 product purchases at the terminals;