

In order to achieve its full potential, e-commerce must overcome numerous security and related issues, including concerns relating to hacker attacks, merchant impersonation, fraud, and transaction repudiation.

BRIEF SUMMARY

In one aspect of the present invention, there is provided a computerized authorization system configured to authorize electronically-made requests to an electronic entity, the computerized authorization system comprising: a store configured to store a plurality of indications of a corresponding plurality of predetermined electronic authorization devices configured to authorize an electronically-made request to an electronic entity; the computerized authorization system being further configured such that: in response to receiving the electronically-made request to the electronic entity, an indication of the electronically-made request to the electronic entity is output to the plurality of predetermined electronic authorization devices configured to allow a corresponding plurality of users to provide one or more authorizations of the electronically-made request to the electronic entity as indicated in the store; and in response to receiving the one or more authorizations from the corresponding one or more predetermined electronic authorization devices of the plurality of predetermined electronic authorization devices, an indication of authorization of the electronically-made request to the electronic entity is output to the electronic entity when the one or more authorizations meet a predetermined criterion.

In another aspect of the present invention, there is provided a computerized authorization method, the computerized authorization method comprising: in response to receiving an electronically-made request to an electronic entity, sending an indication of the electronically-made request to the electronic entity to a plurality of predetermined electronic authorization devices as indicated in a store, wherein the plurality of predetermined electronic authorization devices are configured to allow a corresponding plurality of users to provide one or more authorizations of the electronically-made request to the electronic entity; and in response to receiving one or more authorizations from the corresponding one or more predetermined electronic authorization devices of the plurality of predetermined electronic authorization devices as indicated in the store, sending an indication of authorization of the electronically-made request to the electronic entity to the electronic entity when the one or more authorizations meet a predetermined criterion.

In a further aspect of the present invention, there is provided an electronic authorization device, the electronic authorization device comprising: an input to receive, from a computerized authorization system, an indication of an electronically-made request to an electronic entity from a different electronic device; a user interface configured to indicate the indication of the electronically-made request to the electronic entity and to allow a user to authorize the electronically-made request to the electronic entity; and an output to output an indication of authorization of the electronically-made request to the electronic entity to the computerized authorization system; the electronic authorization device being configured such that: in response to receiving the indication of the electronically-made request to the electronic entity at the input, the user interface indicates the indication of the electronically-made request to the electronic entity; and in response to the user authorizing the electronically-made request to the electronic entity, outputting from the output the indication of authorization of the electronically-made request to the electronic entity to the computerized authorization system, wherein the indication of authorization of the electronically-made request to the electronic entity output to the computerized authorization system is one of a plurality of indications of authorization of the electronically-made request to the electronic entity sent to the computerized authorization system including by at least one different electronic authorization device.

In yet another aspect, there is provided a computer-readable medium containing a set of instructions to cause a computer to perform a method comprising: in response to receiving an electronically-made request to an electronic entity, sending an indication of the electronically-made request to the electronic entity to a plurality of predetermined electronic authorization devices as indicated in a store; and in response to receiving one or more authorizations from a corresponding one or more of the plurality of predetermined electronic authorization devices as indicated in the storage device, sending an indication of authorization of the electronically-made request to the electronic entity to the electronic entity.

In one aspect, there is provided a computerized authorization system as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

In another aspect, there is provided a computerized authorization method as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

In a further aspect, there is provided an electronic authorization device as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

In yet another aspect, there is provided a computer-readable medium as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

Embodiments of the present invention allow users or customers to exercise a more finegrained control over the authorization of their transactions, independently and in addition to the typical verifications, for example, those conducted by a debit or credit card issuer.

Embodiments of the present invention increase the degree of security in online transactions by, for example, mitigating the effects of MITM attacks and other forms of electronic fraud.

This is achieved by the embodiments of the method and system described herein that intercept and authorize, in a collaborative manner, any sort of electronic activities conducted over a third party system enrolled in a centralized blocking alarm (CBA) program.

The following presents a simplified summary in order to provide a basic understanding of some aspects of the disclosed embodiments. This summary is not an extensive overview and is intended to neither identify key or critical elements nor delineate the scope of such embodiments. Its purpose is to present some concepts of the described embodiments in a simplified form as a prelude to the more detailed description that is presented later.

By way of example, in the computer system and computerized method described herein, the person or people who authorize an electronically-made request to an electronic entity, such as a debit or credit card payment request to a bank, logging-on to a computer account such as an e-mail account, social networking account, or bank account must input authorization from a particular predetermined or particular electronic authorization device (such as a smartphone, computer (laptop or desktop), tablet computer or other suitable electronic device or mobile or portable electronic device). This is an additional security step. This arrangement puts responsibility on authorizing electronically-made requests to the person or people who can make the authorization. In this way, it is very clear to the person or people that a fraudulent electronic request has been made.

Continuing with this example, on an electronically-made request being made, the computerized authorization system receives the request. (The request may also be sent to the

The client device (predetermined electronic authorization device) may be a cell phone, a tablet, a personal computer, or any other kind of Internet connection capable device, whether a commercial general -purpose device or a specialized piece of hardware.

~~In an aspect of specific embodiments of the present invention,~~ There is provided a computerized authorization system configured to authorize electronically-made requests to an electronic entity, the computerized authorization system comprising: a store configured to store an indication of at least one predetermined electronic authorization device configured to authorize each electronically-made request; the computerized authorization system being further configured such that: in response to receiving an electronically-made request to the electronic entity, an indication of the request is output to the at least one predetermined electronic authorization device configured to authorize the request as indicated in the store; and in response to receiving an indication of authorization from the at least one predetermined electronic authorization device, an indication of authorization of the request is output to the electronic entity.

The computerized authorization system may be further configured such that if an indication of authorization of the request is not received from the at least one predetermined electronic authorization device within a predetermined time an indication that the request is rejected is sent to the electronic entity.

The computerized authorization system may be further configured to receive an indication from the at least one predetermined electronic authorization device that the electronically-made request is fraudulent.

The computerized authorization system may be further configured such that, in response to receiving the indication from the at least one predetermined electronic authorization device that the electronically-made request is fraudulent, an identity request is made to identify the electronic device that made the electronically-made request and/or a user of the electronic device.

The identity request may comprise a signal being sent to the electronic device that made the electronically-made request, to capture an image of a user of the electronic device.

The at least one predetermined electronic authorization device may be a different device to an electronic device that makes the electronically-made request.

The computerized authorization system may be configured to send the indication of the electronically-made request to the electronic entity to a plurality of predetermined electronic authorization devices configured to authorize the request.

The indication of authorization may be sent to the electronic entity in response to receiving an indication of the authorization from a predetermined number of a plurality of predetermined electronic authorization devices.

The store may be configured to store the predetermined number of the plurality of predetermined electronic authorization devices.

The computerized authorization system may be further configured to automatically send an indication of authorization of the request to the electronic entity if at least one predetermined criteria are met.

A store may be configured to store the at least one predetermined criteria.

The at least one predetermined criteria may be set by the at least one predetermined electronic authorization device.

The computerized authorization system may comprise a plurality of computers and/or servers on a network.

~~In another aspect of specific embodiments of the present invention,~~ There is also provided a computerized authorization method, the computerized authorization method comprising: in response to receiving an electronically-made request to an electronic entity, sending an indication of the request to at least one predetermined electronic authorization device as indicated in a store; and in response to receiving an indication of the authorization from the at least one predetermined electronic authorization device as indicated in the store, sending an indication of authorization of the request to the electronic entity.

The computerized authorization method may further comprise sending an indication that the request is rejected to the electronic entity if an indication of authorization of the request is not received from the at least one predetermined electronic authorization device within a predetermined time.

The computerized authorization method may further comprise receiving an indication from the at least one predetermined electronic authorization device that the electronically made request is fraudulent.

The computerized authorization method may further comprise in response to receiving the indication from the at least one predetermined electronic authorization device that the electronically-made request is fraudulent, making an identity request to identify the electronic device that made the electronically-made request and/or a user of the electronic device.

The identity request may comprise sending a signal to the electronic device that made the electronically made request, to capture an image of a user of the electronic device.

The at least one predetermined electronic authorization device may be a different device to a device that makes the electronically-made request.

The computerized authorization method may comprise outputting the indication of the electronically-made request to the electronic entity to a plurality of predetermined electronic authorization devices configured to authorize the request.

The computerized authorization method may comprise sending the indication of authorization to the electronic entity in response to receiving an indication of the authorization from a predetermined number of the plurality of predetermined electronic authorization devices. The computerized authorization method may comprise storing the predetermined number of the plurality of predetermined electronic authorization devices in the store.

The computerized authorization method may further comprise automatically sending an indication of authorization of the request to the electronic entity if at least one predetermined criteria are met.

The computerized authorization method may further comprise storing the at least one predetermined criteria in a store.

The at least one predetermined electronic authorization device may be set the at least one predetermined criteria.

The computerized authorization method may be carried out by a plurality of computers and/or servers on a network.

~~In a further aspect of specific embodiments of the present invention, there is provided~~ an electronic authorization device, the electronic authorization device comprising: an input to receive, from a computerized authorization system, an indication of an electronically-made request to an electronic entity from a different electronic device; a user interface configured to indicate the indication of the electronically-made request and to allow a user to authorize the request; and an output to output an indication of authorization of the request to the computerized

wherein each predetermined electronic authorization device of the plurality of electronic authorization devices is configured such that:

in response to receiving the indication of the electronically-made request to the electronic entity at the input, the user interface indicates the indication of the electronically-made request to the electronic entity; and

in response to the user authorizing the electronically-made request to the electronic entity, outputting from the output the indication of authorization of the electronically-made request to the electronic entity to the computerized authorization system.

28. A computerized authorization system according to claim 7, wherein the predetermined number is a majority of the plurality of predetermined electronic authorization devices.

29. A computerized authorization system according to any of claims 1 to 12 or 13, wherein the indication of the electronically-made request to the electronic entity output to the plurality of predetermined electronic authorization devices and the one or more authorization from a corresponding one or more predetermined electronic authorization device of the plurality of predetermined electronic authorization devices are transmitted over HTTPS (hypertext transfer protocol secure).

~~30. A computerized authorization method according to any of claims 13 to 24, wherein the indication of the electronically-made request to the electronic entity sent to the plurality of predetermined electronic authorization devices and the one or more authorizations from the corresponding one or more predetermined electronic authorization devices of the plurality of predetermined electronic authorization devices are transmitted over HTTPS (hypertext transfer protocol secure).~~

30. A computerized authorization system as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

31. A computerized authorization method as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

32. An electronic authorization device as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.

33. A computer-readable medium as substantially hereinbefore described with reference to, and as illustrated by, the accompanying drawings of Figures 1 to 5 and 7 to 12.