

Claims

1. An electronic authentication system for financial auditing, the electronic authentication system comprising:
- 5 ➤ a computing server having
- ❖ a non-transitory machine-readable storage unit configured to store a series of instructions to perform an authentication process;
 - ❖ a processing unit connected to the non-transitory machine-
- 10 readable storage unit for processing the series of instructions automatically; and
- a communicating unit further connected to the processing unit for communicating with an external electronic device via an external communication network;
- 15 wherein the computing server is configured to authenticate at least one external electronic device in order to authenticate communication between the at least one external electronic device and the electronic authentication system.
- 20 2. The electronic authentication system of claim 1, wherein the at least one external electronic device comprises a first external electronic device and a second external electronic device for authenticating communication between the first external electronic device and the second external electronic device.

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3. The electronic authentication system of claim 1, wherein
the computing server is configured to authenticate the at least one external
electronic device via reciprocal exchange of authorized electronic signals
between the computing server and one of the two external electronic devices.
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4. The electronic authentication system of claim 2, wherein
the computing server is configured to authenticate a third external electronic
device for its communication with the first external electronic device, the
second external electronic device or both.
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5. The electronic authentication system of claim 1, wherein
the electronic authentication system is configured to accredit authentication
from the at least one external electronic device to another electronic device.
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6. The electronic authentication system of claim 1, wherein
the electronic authentication system is configured to authenticate at least one
delegate electronic device accredited by the at least one external electronic
device.
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7. The electronic authentication system of claim 1, wherein
the electronic authentication system is configured to authenticate the at least
one external electronic device via encrypted electronic communication.

8. The electronic authentication system of claim 1, wherein the electronic authentication system is configured to communicate with a cloud computing device for using computing resource of a remote computer.
- 5 9. The electronic authentication system of claim 1, wherein the electronic authentication system is configured to embed authentication information into an electronic report for accessing by the at least one external electronic device.
- 10 10. The electronic authentication system of claim 2, wherein the electronic authentication system is configured to transfer authentication information of the first external electronic device to the second external electronic device.
- 15 11. The electronic authentication system of claim 1, wherein the series of instructions comprise an artificial intelligence (AI) algorithm for automatically causing the computing server to perform the authentication process.
- 20 12. The electronic authentication system of claim 11, wherein the artificial intelligence (AI) algorithm is configured to increase its trust of authenticating the at least one external electronic device when noticing past successful authentication of the at least one external electronic device for communication with other external electronic devices.

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13. An electronic authentication process for financial auditing, the electronic authentication process comprising:
- collecting authentication information of at least one external electronic device from an external source of an electronic authentication system;
 - 5 ➤ authenticating the at least one external electronic device by communicating with the at least one external electronic device by utilizing the authentication information;
 - providing the authorization information of the at least one external electronic device to a third party.
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14. The electronic authentication process of claim 13 further comprising
- collecting authentication information of a first external electronic device and a second external electronic device from the external source; and
 - 15 ➤ authenticating the first external electronic device and the second external electronic device for authenticating communication between the first external electronic device and the second external electronic device.
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15. The electronic authentication process of claim 14 further comprising
- authenticating a third external electronic device; and
 - providing authentication information of the third external electronic device to the first external electronic device, the second external electronic device or both after authenticating the third external
 - 25 electronic device.

16. The electronic authentication process of claim 15 further comprising:
- initiating a confirmation request from a first external electronic device of an auditor to an electronic authentication system;
 - 5 ➤ authorizing the confirmation request from a second external electronic device of a client to the computing server; and
 - responding the confirmation request from a third external electronic device of a responder to the computing server;
- 10 wherein the first external electronic device, the second external electronic device, the third external electronic device or a combination of any of these devices are configured to be authenticated by the electronic authentication system.
17. The electronic authentication process of claim 13, further comprising
- 15 sending warning signals to the electronic authentication system, the at least one external electronic device or both in case of failure of authentication.
18. The electronic authentication process of 13, further comprising
- 20 authenticating the at least one external electronic device via reciprocal exchange of authorized electronic signals between the computing server and the at least one external electronic device.
19. The electronic authentication process of 13 further comprising:
- 25 communicating with the at least one external electronic device via multiple electronic communication network.

20. The electronic authentication process of claim 13 further comprising giving a predetermined scope of authorization to the at least one external electronic device.
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21. The electronic authentication process of claim 13 further comprising approving delegation of authentication from the at least one external electronic device to another electronic device.
- 10 22. The electronic authentication process of claim 13 further comprising embedding authentication information of the electronic authentication system into an electronic report for accessing by the at least one external electronic device.
- 15 23. The electronic authentication process of claim 13 further comprising performing the authentication process by an artificial intelligence (AI) algorithm automatically.
- 20 24. The electronic authentication process of claim 13 further comprising incorporating a machine learning model for the authentication process.

25. A non-transitory, computer-readable medium storing one or more instructions executable by an electronic authentication system to perform authentication process to external electronic devices for financial auditing, the process comprising:
- 5 ➤ collecting authentication information of at least one external electronic device from an external source of an electronic authentication system;
- authenticating the at least one external electronic device by communicating with the at least one external electronic device by
10 utilizing the authentication information;
- providing authorization information of the at least one external electronic device to a third party.
26. The non-transitory, computer-readable medium of claim 25, the process
15 further comprising:
- authenticating a first external electronic device;
- authenticating a second external electronic device; and
- providing authorization information of the first external electronic device and the second external electronic device to each other for
20 authorizing electronic communication between the first external electronic device and the second external electronic device after authenticating the first external electronic device and the second external electronic device.

27. The non-transitory, computer-readable medium of claim 26, wherein the process further comprising
- authenticating a third external electronic device; and
 - providing authorization information of a third external electronic device
- 5 to the first external electronic device, the second external electronic device or both after authenticating the third external electronic device.
28. The non-transitory, computer-readable medium of claim 27, wherein the process further comprising:
- 10 ➤ initiating a confirmation request from a first external electronic device of an auditor to an electronic authentication system;
 - authorizing the confirmation request from a second external electronic device of a client to a computing server of the electronic authentication system; and
 - 15 ➤ responding the confirmation request from the third external electronic device of a responder to the computing server;
 - the first external electronic device, the second external electronic device, the third external electronic device or a combination of any of these devices being configured to be authenticated by the electronic
 - 20 authentication system.

29. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
authenticating the at least one external electronic device via reciprocal
5 exchange of authorized electronic signals between the computing server and one of the at least one external electronic device.
30. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising:
10 communicating with the at least one external electronic device via multiple electronic communication network.
31. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
15 giving a predetermined scope of authorization to the at least one external electronic device.
32. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
20 approving delegation of authentication from the at least one external electronic device to another electronic device.

33. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
embedding authentication information of the electronic authentication system
5 into an electronic report for accessing by the at least one external electronic device.
34. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
10 performing an authentication process by an artificial intelligence (AI) algorithm for automatically.
35. The non-transitory, computer-readable medium of claim 25, wherein the process further comprising
15 incorporating a machine learning model for the authentication process.