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(71) Applicant *(for all designated States except US)*: **MOTOROLA, INC.** [US/US]; 1303 East Algonquin Road, Schaumburg, Illinois 60196 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **BEDEKAR, Anand S.,** [IN/US]; 323 Happfield Drive, Apt. 303, Arlington Heights, Illinois 60004 (US). **AGRAWAL, Rajeev,** [US/US]; 3939 Carousel, Northbrook, Illinois 60062 (US).

(74) Agents: **ANOLICK, Simon B.,** et al.; 1303 East Algonquin Road, Schaumburg, Illinois 60196 (US).

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(54) **Title:** METHOD AND APPARATUS FOR DETECTING A COMPROMISED NODE IN A NETWORK

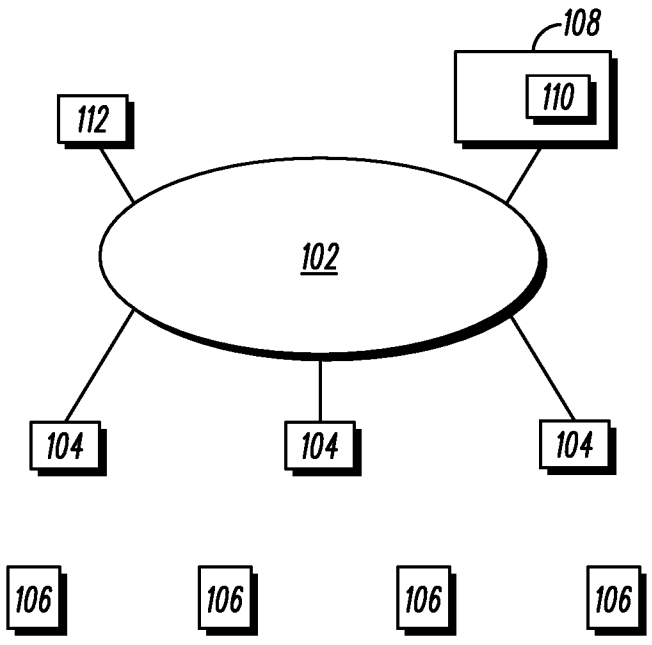


FIG. 1

(57) **Abstract:** A secured message indicates that a node (104) in a network (102) is operating correctly and detecting that the node is compromised such that a device (106) should not communicate with the node. When the node is detected to be compromised, the secured message ceases to be transmitted to the node and the device. The secured message may include a time stamp portion and a security portion. A secured timestamp server (110) includes a transceiver (202) that receives notifications from a network management server (108) and transmits secured messages for use by the device. A processor (204) provides the secured message with a time stamp portion and a security portion when notifications indicate a node in the network is properly operating and ceases the transmission of the secured message when notifications indicate that the node is compromised.

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AMENDED CLAIMS

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1. A method comprising:

transmitting a secured message to indicate that a node in a network is operating correctly;

detecting that the node is compromised such that a device should not communicate with the node;

ceasing to transmit the secured message when the node is detected to not be working properly wherein the secured message is transmitted to the node and the node transmits the secured message to the device.

2. The method of claim 1 wherein the secured message comprises a time stamp portion and a security portion.

3. The method of claim 1 wherein transmitting a secured message further comprising transmitting a plurality of secured messages to indicate that the node in the network is operating correctly wherein each of the plurality of secured messages is transmitted at a predetermined interval.

4. A method comprising:

receiving at a device a message from a node;

verifying that the message is a secured message received by the node from an external source to indicate that the node has not been compromised;

interrupting communications with the node when one of (a) the device detects that the message is a not a secured message and (b) the device does not receive the message from the node within a specified interval.

5. The method of claim 4 wherein the secured message includes a time stamp portion and a security portion.

6. The method of claim 4 further comprising synchronizing the device with the external source.

7. An apparatus comprising:

a transceiver for receiving notifications from a source and transmitting secured messages for use by a device operating on a network;

a processor coupled to the transceiver wherein the processor is configured to provide the secured message with a time stamp portion and a security portion when notifications indicate that a node in the network is properly operating and ceases to have the secured message be transmitted by the transceiver when the notifications indicate that the node is not operating properly.

8. The apparatus of claim 7 wherein the processor is further configured to synchronize the apparatus to the device.

9. The apparatus of claim 7 wherein the processor provides the security portion of the secured message by using a key accessible only to the apparatus.