



US 20230231842A1

(19) **United States**
(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231842 A1**
Nedungadi et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **METHODS AND SYSTEMS FOR NETWORK
DEVICE AUTHENTICATION**

(52) **U.S. Cl.**
CPC **H04L 63/0823** (2013.01); **G06F 9/547**
(2013.01); **H04L 63/166** (2013.01);
H04L 67/28 (2013.01)

(71) Applicant: **Nile Global, Inc.**, San Jose, CA (US)

(72) Inventors: **Promode Nedungadi**, San Jose, CA
(US); **Steve Alexander**, Woodside, CA
(US); **Avinash Kumar**, San Ramon, CA
(US)

(57) **ABSTRACT**

Embodiments of a device and method are disclosed. In an embodiment, a method for network device authentication involves using Remote Procedure Call (RPC) proxies of network devices of a network at a customer site, accessing identity certificates from Trusted Platform Modules (TPMs) of the network devices, and using the RPC proxies, sequentially establishing Transport Layer Security (TLS) connections between the network devices to perform mutual authentication between the network devices based on the identity certificates.

(21) Appl. No.: **17/579,467**

(22) Filed: **Jan. 19, 2022**

Publication Classification

(51) **Int. Cl.**
H04L 9/40 (2006.01)
H04L 67/56 (2006.01)
G06F 9/54 (2006.01)

