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(54) **INFORMATION SECURITY SYSTEM AND METHOD FOR DENIAL-OF-SERVICE DETECTION**

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(57) **ABSTRACT**

A system for detecting Denial-of-Service (DoS) attacks on one or more user profiles collects a number of invalid sign-on attempts on the one or more user profiles during every time interval. The system determines a number of invalid sign-on attempts on every user profile since the start of the first time interval. The system detects a first DoS attack on a particular user profile if a first number of invalid sign-on attempts on the particular user profile exceeds a single-user profile. The system detects a second DoS attack on multiple user profiles during the first time interval if the increase in the total number of invalid sign-on attempts since the last time interval exceeds a scan-level threshold number. The system detects a third DoS attack on multiple user profiles if the total number of invalid sign-on attempts detected during combined time intervals exceeds a third threshold number.

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