

Title (en)
SYSTEM AND METHOD TO DETECT ATTACKS ON MOBILE WIRELESS NETWORKS BASED ON NETWORK CONTROLLABILITY ANALYSIS

Title (de)
SYSTEM UND VERFAHREN ZUR ERKENNUNG VON ANGRIFFEN AUF MOBILFUNKNETZWERKE BASIEREND AUF
NETZWERKKONTROLLIERBARKEITSANALYSE

Title (fr)
SYSTÈME ET PROCÉDÉ DE DÉTECTION D'ATTAQUES SUR DES RÉSEAUX SANS FIL MOBILES D'APRÈS UNE ANALYSE DE
CONTRÔLABILITÉ DU RÉSEAU

Publication
EP 3272075 A4 20181205 (EN)

Application
EP 16812078 A 20160318

Priority
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• US 201562135136 P 20150318
• US 2016023308 W 20160318

Abstract (en)
[origin: WO2016204838A2] Described is a system for detecting attacks on networks. A hierarchical representation of activity of a communication network is used to detect and predict sources of misinformation in the communication network. The hierarchical representation includes temporal patterns of communication between at least one pair of nodes, each temporal pattern representing a motif having a size, in the hierarchical representation. Changes in motifs provide a signal for a misinformation attack.

IPC 8 full level
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CPC (source: CN EP US)
G06F 21/554 (2013.01 - EP US); **H04L 63/1408** (2013.01 - EP); **H04L 63/1416** (2013.01 - CN); **H04L 63/1441** (2013.01 - CN);
H04W 12/122 (2021.01 - EP US)

Citation (search report)
• [X] WO 2006104752 A1 20061005 - LUCENT TECHNOLOGIES INC [US]
• [X] US 2012131674 A1 20120524 - WITTENSCHLAEGER THOMAS [US]
• [A] US 2010037318 A1 20100211 - FRENCH PAUL [IE], et al
• [A] WANG CHUNLEI ET AL: "Network Survivability Analysis Based on Stochastic Game Model", MULTIMEDIA INFORMATION NETWORKING AND SECURITY (MINES), 2012 FOURTH INTERNATIONAL CONFERENCE ON, IEEE, 2 November 2012 (2012-11-02), pages 99 - 104, XP032303417, ISBN: 978-1-4673-3093-0, DOI: 10.1109/MINES.2012.147
• [A] PASQUALETTI FABIO ET AL: "Controllability Metrics, Limitations and Algorithms for Complex Networks", IEEE TRANSACTIONS ON CONTROL OF NETWORK SYSTEMS, IEEE, vol. 1, no. 1, 1 March 2014 (2014-03-01), pages 40 - 52, XP011544900, DOI: 10.1109/TCNS.2014.2310254
• See references of WO 2016204839A2

Designated contracting state (EPC)
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WO 2016204838 A2 20161222; WO 2016204838 A3 20170126; WO 2016204838 A9 20170615; CN 107251519 A 20171013;
CN 107251519 B 20200612; CN 107409124 A 20171128; CN 107409124 B 20200915; EP 3272075 A2 20180124; EP 3272075 A4 20181205;
EP 3272102 A2 20180124; EP 3272102 A4 20181114; WO 2016204839 A2 20161222; WO 2016204839 A3 20170126

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