

Title (en)  
OPTICAL COMMUNICATIONS SECURITY DEVICE AND SYSTEM

Title (de)  
SICHERHEITSEINRICHTUNG UND SYSTEM FÜR DIE OPTISCHE KOMMUNIKATION

Title (fr)  
DISPOSITIF ET SYSTÈME DE SÉCURITÉ DE COMMUNICATIONS OPTIQUES

Publication  
**EP 2168273 A4 20131204 (EN)**

Application  
**EP 08756873 A 20080530**

Priority  
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Abstract (en)  
[origin: WO2008144844A1] An apparatus for detection of intrusion events on a first optical transmission line, the apparatus comprising: a first optical monitoring module (130) for sampling a first optical input signal (112) propagating on the optical transmission line (101), and including a plurality of first optical wavelength signals (120) to form a first sampled signal (114) for monitoring the first optical input signal (112), the first optical monitoring module (130) including a first wavelength selective module (135) and a first optical detection module (137), the first wavelength selective module (135) adapted to receive the first sampled signal (114) and direct one or more of the first optical wavelength signals (120) in the first sampled signal (114) to the first optical detection module (137), thereby to monitor the one or more of the first wavelength signal (112); and an analysing module (150) operatively coupled to the first optical monitoring module (130) for analysing the first sampled signal (114) for characteristics associated with a possible intrusion event on the first optical transmission line (101). When such an intrusion event is identified, the analysing module (150) generates an alarm signal to a network management system (121). The optical apparatus also includes optical encryption (410) and decryption (440) modules to accommodate encrypted optical signals on the communications link (101); and optical test input ports (571, 573) for connection to optical test devices (580, 590).

IPC 8 full level  
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CPC (source: EP)  
**H04B 10/85** (2013.01)

Citation (search report)  
• [X] US 4973169 A 19901127 - SLONECKER MARK H [US]  
• [A] US 2002131106 A1 20020919 - SNAWERDT PETER [US]  
• [A] US 6507012 B1 20030114 - MEDARD MURIEL [US], et al  
• [XP] JEDIDI A ET AL: "Hardware-based monitoring method for all-optical components", ICTON MEDITERRANEAN WINTER CONFERENCE, 2007. ICTON-MW 2007, IEEE, PI, 1 December 2007 (2007-12-01), pages 1 - 5, XP031212264, ISBN: 978-1-4244-1638-7  
• See references of WO 2008144844A1

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