

Title (en)

METHODS AND APPARATUS FOR COHERENT HOLOGRAPHIC DATA CHANNELS

Title (de)

VERFAHREN UND VORRICHTUNG FÜR KOHÄRENTE HOLOGRAPHISCHE DATENKANÄLE

Title (fr)

PROCÉDÉS ET APPAREIL POUR CANAUX DE DONNÉES HOLOGRAPHIQUES COHÉRENTS

Publication

**EP 3138098 A4 20171213 (EN)**

Application

**EP 15786499 A 20150429**

Priority

- US 201461986083 P 20140429
- US 201414484060 A 20140911
- US 2015028356 W 20150429

Abstract (en)

[origin: WO2015168325A1] Methods and devices for coherent holographic data channel techniques are presented. Coherent techniques for data detection generally include homodyne and heterodyne detection. Techniques for quadrature homodyne detection, resampling quadrature homodyne detection, n-rature homodyne detection, and spatial waveform demodulation are presented. Coherent detection techniques in turn enable coherent channel modulation techniques such as phase modulation (including binary phase shift keying, or BPSK; phase quadrature holographic multiplexing, or QPSK; and quadrature amplitude modulation, or QAM). Coherent detection may also enable or improve the performance of other channel techniques such as partial response maximum likelihood (PRML), the various classes of extended PRML, and of noise-predictive maximum likelihood (NPML) detection.

IPC 8 full level

**G11B 7/0065** (2006.01); **G11B 7/007** (2006.01)

CPC (source: EP KR)

**G11B 7/0065** (2013.01 - EP KR); **G11B 7/128** (2013.01 - EP KR); **G11B 20/10009** (2013.01 - EP KR); **G11B 20/10277** (2013.01 - EP KR)

Citation (search report)

- [XI] US 2013215730 A1 20130822 - OKAMOTO ATSUSHI [JP], et al
- [A] US 2008067321 A1 20080320 - MIYAMOTO HARUKAZU [JP], et al
- [A] US 2014036651 A1 20140206 - SEKIGUCHI KOJI [JP], et al
- [A] US 2014023816 A1 20140123 - KITAHARA TOSHIYUKI [JP]
- [A] US 6445453 B1 20020903 - HILL HENRY ALLEN [US]
- [A] US 2013343171 A1 20131226 - NAKAMURA YUSUKE [JP]
- [A] US 7848595 B2 20101207 - AYRES MARK R [US], et al
- See references of WO 2015168325A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2015168325 A1 20151105**; EP 3138098 A1 20170308; EP 3138098 A4 20171213; JP 2017519323 A 20170713;  
KR 20160147987 A 20161223

DOCDB simple family (application)

**US 2015028356 W 20150429**; EP 15786499 A 20150429; JP 2016565251 A 20150429; KR 20167033508 A 20150429