

Title (en)

Optical device for processing digital optical signals

Title (de)

Optisches Gerät zur Verarbeitung von digitalen optischen Signalen

Title (fr)

Dispositif optique de traitement de signaux optiques numériques

Publication

EP 1004954 A1 20000531 (EN)

Application

EP 98203978 A 19981125

Priority

EP 98203978 A 19981125

Abstract (en)

An optical device (500) comprising a first element (100) capable of supplying a digital optical signal comprising at least one sequence (1000) of N bits modulated by a suitable phase modulation; a series-parallel converter (6) for converting the said at least one sequence (1000) of N bits into a spatial pattern (3000) of N bits in parallel, carrying the same information as the said sequence (1000) of N bits; and a second element (9) capable of carrying out an operation of comparison between the said spatial pattern (3000) of N bits and a predetermined spatial reference pattern of N bits, and of supplying at the output a signal (2000) having an intensity whose value depends on the result of the said comparison operation, in which the said suitable phase modulation is $0/\alpha\pi$, in which $0 < \alpha < 1$. <IMAGE>

IPC 1-7

G06E 3/00

IPC 8 full level

G06E 1/00 (2006.01); **G06E 3/00** (2006.01)

CPC (source: EP)

G06E 1/00 (2013.01)

Citation (search report)

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- [A] EP 0587020 A2 19940316 - TEXAS INSTRUMENTS INC [US]
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GB2445588A; GB2560584A; GB2560584B; US8285138B2; US11062101B2

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 1004954 A1 20000531; **EP 1004954 B1 20040512**; **EP 1004954 B9 20041103**; DE 69823839 D1 20040617; DE 69823839 T2 20050811

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