

Title (en)
Optic smoke detector

Title (de)
Optischer Rauchmelder

Title (fr)
Détecteur optique de fumée

Publication
EP 0588232 B1 19970709 (DE)

Application
EP 93114472 A 19930909

Priority
CH 288492 A 19920914

Abstract (en)
[origin: EP0588232A1] An improved optical smoke detector is obtained if at least one planar-optical element (5) is arranged in the beam path between radiation source (1) and radiation receiver (2). This element can be either a diffractive element, preferably a holographic-optical element (HOE) or a micro-Fresnel reflector (MFR). <IMAGE>

IPC 1-7
G08B 17/107

IPC 8 full level
G08B 17/107 (2006.01)

CPC (source: EP US)
G08B 17/107 (2013.01 - EP US); **G08B 17/113** (2013.01 - EP US)

Cited by
EP0813178A1; US11506590B2; EP1855259A1; DE10353837B4; EP3128493A1; CN107851355A; EP3270362A1; WO0062267A1; DE102007045018A1; US8441368B2; WO9916033A1; WO2017021217A1; EP3270362B1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0588232 A1 19940323; EP 0588232 B1 19970709; AT E155272 T1 19970715; CH 684556 A5 19941014; DE 59306866 D1 19970814; ES 2106930 T3 19971116; US 5451931 A 19950919

DOCDB simple family (application)
EP 93114472 A 19930909; AT 93114472 T 19930909; CH 288492 A 19920914; DE 59306866 T 19930909; ES 93114472 T 19930909; US 12094793 A 19930914