

Title (en)  
OPTICAL SENSOR

Title (de)  
OPTISCHES SENSORELEMENT

Title (fr)  
DETECTEUR OPTIQUE

Publication  
**EP 0808452 A1 19971126 (DE)**

Application  
**EP 96939894 A 19961122**

Priority  
• DE 19545414 A 19951206  
• EP 9605155 W 19961122

Abstract (en)  
[origin: DE19545414A1] The invention relates to an optical sensor for identifying organic compounds, in particular hydrocarbons. The object of the invention is to define said sensor which detects selectively known substances using subassemblies producing spectral shifts. The object is attained in that a spectral band-pass filter is used which contains at least one layer with a modifiable, optical thickness of  $\lambda/4$  or of  $\lambda/2$  or a multiple thereof. Said layer has hydrophobic properties and organic affinity groups, the selection of which can be adapted to the substance to be detected.

IPC 1-7  
**G01N 21/41**; **G01N 21/75**

IPC 8 full level  
**G01N 21/41** (2006.01); **G01N 21/75** (2006.01)

CPC (source: EP US)  
**G01N 21/41** (2013.01 - EP US); **G01N 21/75** (2013.01 - EP US); **Y10T 428/24975** (2015.01 - EP US); **Y10T 428/249955** (2015.04 - EP US); **Y10T 428/249956** (2015.04 - EP US); **Y10T 428/249958** (2015.04 - EP US); **Y10T 428/249979** (2015.04 - EP US); **Y10T 428/24998** (2015.04 - EP US)

Citation (search report)  
See references of WO 9721092A1

Designated contracting state (EPC)  
CH DE FR GB LI NL

DOCDB simple family (publication)  
**DE 19545414 A1 19970612**; **DE 19545414 C2 20021114**; EP 0808452 A1 19971126; US 6007904 A 19991228; WO 9721092 A1 19970612

DOCDB simple family (application)  
**DE 19545414 A 19951206**; EP 9605155 W 19961122; EP 96939894 A 19961122; US 86077197 A 19970703