

Title (en)  
LED-SIGNAL DEVICE FOR TRAFFIC LIGHTS

Title (de)  
LED-SIGNALEINRICHTUNG FÜR STRASSENVERKEHRSSIGNALE

Title (fr)  
DISPOSITIF DE SIGNAUX A DEL POUR SIGNAUX DE TRAFIC ROUTIER

Publication  
**EP 1344200 A1 20030917 (DE)**

Application  
**EP 00991113 A 20001222**

Priority  
DE 0004591 W 20001222

Abstract (en)  
[origin: WO02052524A1] The invention relates to an optical signalling device, whereby a particular given radiation property or light density distribution is achieved merely by means of an arrangement of a number of light elements (2) on a baseplate (1). Complicated optical structures are thus not necessary for production of said light distribution. The invention further relates to an optical signalling device with an outwardly bowed lens (3) for improvement of the light concentration property.

IPC 1-7  
**G08G 1/095**

IPC 8 full level  
**G08G 1/095** (2006.01)

CPC (source: EP US)  
**F21V 5/045** (2013.01 - EP US); **G08G 1/095** (2013.01 - EP US); **F21W 2111/02** (2013.01 - EP US); **F21Y 2105/12** (2016.07 - EP US);  
**F21Y 2115/10** (2016.07 - EP US); **G02B 27/0955** (2013.01 - EP US)

Citation (search report)  
See references of WO 02052524A1

Designated contracting state (EPC)  
AT CH FR GB LI

DOCDB simple family (publication)  
**WO 02052524 A1 20020704**; EP 1344200 A1 20030917; US 2004056777 A1 20040325; US 2006262532 A1 20061123;  
US 7101059 B2 20060905; US 7390107 B2 20080624

DOCDB simple family (application)  
**DE 0004591 W 20001222**; EP 00991113 A 20001222; US 48903306 A 20060719; US 60153203 A 20030623