

Title (en)

Optical element for a variable message sign

Title (de)

Optisches Element für Wechselverkehrszeichen

Title (fr)

Élément optique pour panneaux de signalisation routière variable

Publication

EP 1643473 A1 20060405 (DE)

Application

EP 04023304 A 20040930

Priority

EP 04023304 A 20040930

Abstract (en)

The optical element for an alternating traffic sign comprises a longitudinal housing (5,15) in which there is at least one light source (3) around which at least two lenses (9,13) are arranged over one another in the longitudinal direction of the housing. The lenses regulate the rays' direction. The housing comprises a first housing section in which the light source and the collector lens (9) are fixed and a second housing section in which the stabilising lens (13) is fixed and is where the mounting of the element is achieved. The second housing section is mounted on to the first housing section, with the first housing section having a hollow chamber (31) in which the second housing section is fixed such as to achieve a stable fixture.

IPC 8 full level

G09F 9/33 (2006.01); **G08G 1/095** (2006.01)

CPC (source: EP US)

F21V 5/04 (2013.01 - EP US); **G09F 9/33** (2013.01 - EP US); **F21W 2111/02** (2013.01 - EP US)

Citation (search report)

- [DA] EP 0930600 A1 19990721 - SWARCO FUTURIT VERKEHRSSIGNALS [AT]
- [A] WO 2004068447 A1 20040812 - SWARCO FUTURIT VERKEHRSSYSTEME [AT], et al
- [A] US 4779967 A 19881025 - MURPHY ROBERT A [US], et al

Cited by

EP2860719A1; EP3267427A1; US9171488B2; US9443452B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1643473 A1 20060405; EP 1643473 B1 20070214; AT E354152 T1 20070315; BR PI0504348 A 20060509; DE 502004002913 D1 20070329; US 2006077661 A1 20060413; US 7591574 B2 20090922

DOCDB simple family (application)

EP 04023304 A 20040930; AT 04023304 T 20040930; BR PI0504348 A 20050920; DE 502004002913 T 20040930; US 23690105 A 20050928