

Title (en)  
A highway electronic display

Title (de)  
Elektronische Autobahnanzeige

Title (fr)  
Affichage électronique d'autoroute

Publication  
**EP 2226780 A1 20100908 (EN)**

Application  
**EP 09154130 A 20090302**

Priority  
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Abstract (en)  
The present invention is directed to a highway electronic display comprising a printed circuit board (PCB) having a plurality of light emitting diodes (LEDs), an optics stage, and a display cover. The optics stage comprises an alignment plate and an optics plate, the alignment plate comprising a sheet of opaque material positioned intermediate the PCB and the optics plate and having a plurality of through holes arranged in rows and columns coincident with the LEDs, and the optics plate comprises a sheet of transparent material having a plurality of optical elements arranged in rows and columns coincident with the LEDs. Each optical element comprises a convex boss protruding outwardly from a rear face of the optics plate proximal the LEDs and a cylinder having a diffusing lens protruding outwardly from a front face of the optics plate distal from the LEDs. Each optical element is formed in a single, unitary piece with the sheet of transparent material. The advantage of providing such a highway electronic display is that the optics plate will be more cost effective to manufacture than manufacturing a plurality of individual optical elements.

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**G09F 9/33** (2013.01 - EP US); **G09F 13/0472** (2021.05 - EP); **G09F 13/22** (2013.01 - EP); **G09F 19/22** (2013.01 - EP US);  
**G09F 27/008** (2013.01 - EP)

Citation (applicant)  
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• US 6078439 A 20000620 - SILHENGST FRANZ [AT], et al  
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Citation (search report)  
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