

Title (en)  
RETROPROJECTION SCREEN

Title (de)  
RÜCKPROJEKTIONSSCHIRM

Title (fr)  
ECRAN DE RETROPROJECTION

Publication  
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Application  
**EP 04742433 A 20040402**

Priority  
• FR 2004000839 W 20040402  
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Abstract (en)  
[origin: WO2004090631A2] The invention relates to a retroprojection screen, with successively from the projector side to the exterior, a fresnel lens (6), a surface diffuser (8), a thin support (10) glued to a thick substrate (24), provided with an external anti-reflective coating (26). The light emitted by the projector (2) is collimated by the fresnel lens (6), crosses the diffuser (8) with an extended beam pattern having a horizontal longitudinal axis. Said diffuser provides the spread of light in the horizontal plane such as to give a large horizontal viewing angle. The light exiting the diffuser impinges on a support (10) with cylindrical focussing elements (18), essentially parallel to the longitudinal axis of the beam pattern of the diffuser and an opaque layer (20) with openings (22) which permit the passage of light focussed with the focussing elements. As the focussing elements are parallel to the longitudinal axis of the diffuser, almost all the light projected is transmitted. The focussing elements provide the screen with a suitable vertical viewing angle. The opaque layer provides an optimum contrast due to the rearward position of the diffuser (8) with relation to the support (10).

IPC 1-7  
**G03B 21/62**

IPC 8 full level  
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