

Title (en)

DIFFUSER DISK FOR LCD APPLICATIONS, METHOD FOR THE PRODUCTION AND USE THEREOF

Title (de)

STREUSCHEIBE FÜR LCD-ANWENDUNGEN, VERFAHREN ZU DEREN HERSTELLUNG UND VERWENDUNG

Title (fr)

DIFFUSEUR POUR APPLICATIONS LCD, PROCEDE DE PRODUCTION CORRESPONDANT ET UTILISATION

Publication

EP 1660935 A1 20060531 (DE)

Application

EP 04732288 A 20040512

Priority

- EP 2004005058 W 20040512
- DE 10336130 A 20030804

Abstract (en)

[origin: DE10336130A1] A scattering screen for LCD applications comprises at least one light scattering polymethylmethacrylate layer comprising a polymethylmethacrylate matrix and spherical particles (A) and spherical particles (B) having different average particle sizes with at least one particle type having a refractive index that is different to that of polymethylmethacrylate matrix. A scattering screen for LCD applications comprises at least one light scattering polymethylmethacrylate layer comprising a polymethylmethacrylate matrix and 0.5-59.5 wt.% of spherical scattering particles (A) having an average particle size of 0.1-40 μm and a refractive index that is different to that of polymethylmethacrylate matrix by 0.02-2 and 0.5-59.5 wt.% of spherical scattering particles (B) having an average particle size of 10-150 μm and a refractive index that is different to that of polymethylmethacrylate matrix by 0-0.2 whereby the total concentration of (A) and (B) is 1-60 wt.% (with respect to the light scattering polymethylmethacrylate layer) and the particles (A) and (B) are of different average particle diameter and the screen (I) has a transmission value of 20-70% and scattering level of greater than 0.3 whereby ratio of the square of the average surface roughness of the polymethylmethacrylate layer R_z to the cube of the particle size of (B) $R_z^2/z/DPB3$ is 0.0002-0.1300 μm^{-1} $\rightarrow 1$. An independent claim is included for a process for the production of the screen (I) by extrusion of a composition comprising polymethylmethacrylate, particles (A) and particles (B).

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2005022245A1

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