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Ohtake et al.

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- [54] **PLASTIC OPTICAL MEMBER AND LIGHT-QUANTITY-CONTROLLING MEMBER EACH HAVING A LIGHT-DIFFUSING LAYER ON ITS SURFACE**
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- [73] Assignee: **Ohno Research & Development Laboratories Co. Ltd., Yokohama, Japan**

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- Derwent Publications Ltd. London, GB AN 86-058934 & JP 61 010499 Jan. 17, 1986.

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 § 102(e) Date: **Apr. 27, 1992**
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- [51] Int. Cl.⁶ **G02B 13/20; G02B 5/02; A61G 13/00**
- [52] U.S. Cl. **359/707; 359/599; 362/33**
- [58] Field of Search **359/599, 707, 893, 894, 359/619; 362/26, 31, 33**

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Assistant Examiner—Thong Nguyen
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[57] ABSTRACT

There is provided a plastics optical member having on its surface a light-diffusing layer composed of a layer of micro-joints formed by immersing a plastics material successively in a good solvent and a poor solvent, and a plastics light-quantity-controlling member having on its surface a white pattern composed of the micro-joints. The superiority in light diffuse reflection, transmission and light-quantity-controlling property permit their incorporation into various optical systems such as screens for projection, various displays, light-source-directly-under-an-illumination-surface type light boxes, edge light type light boxes, etc.

8 Claims, 6 Drawing Sheets

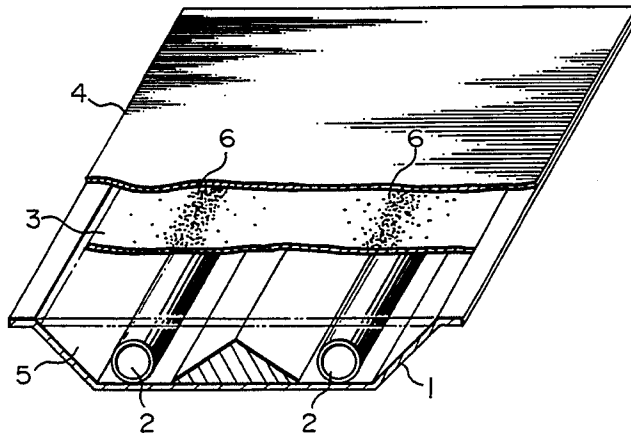


FIG. 1

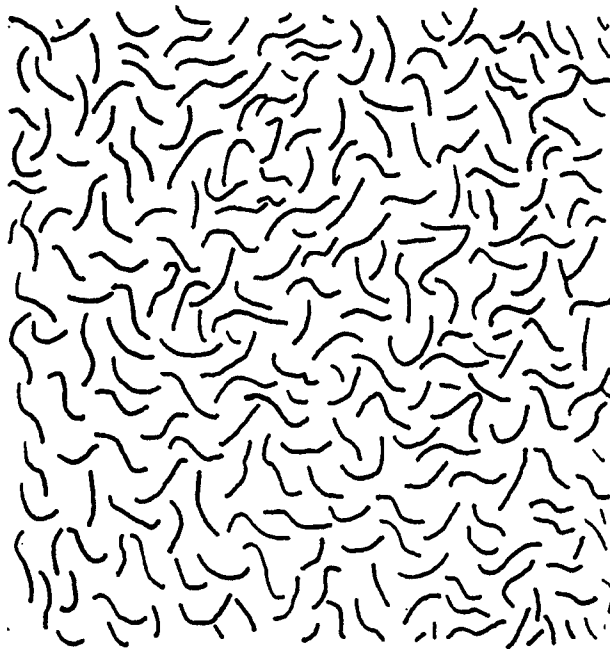


FIG. 2

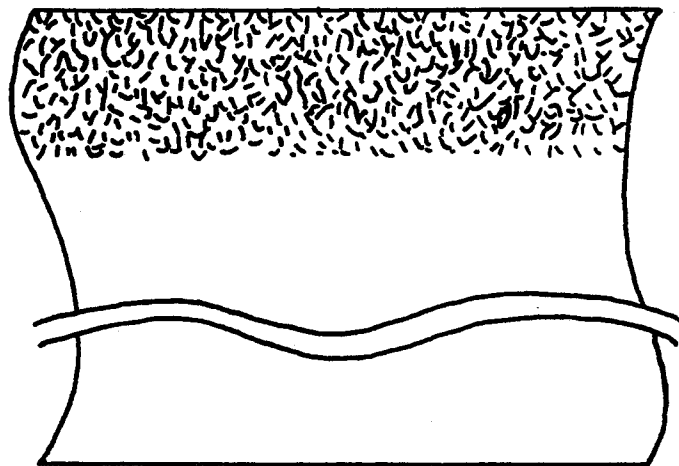


FIG. 3



FIG. 4

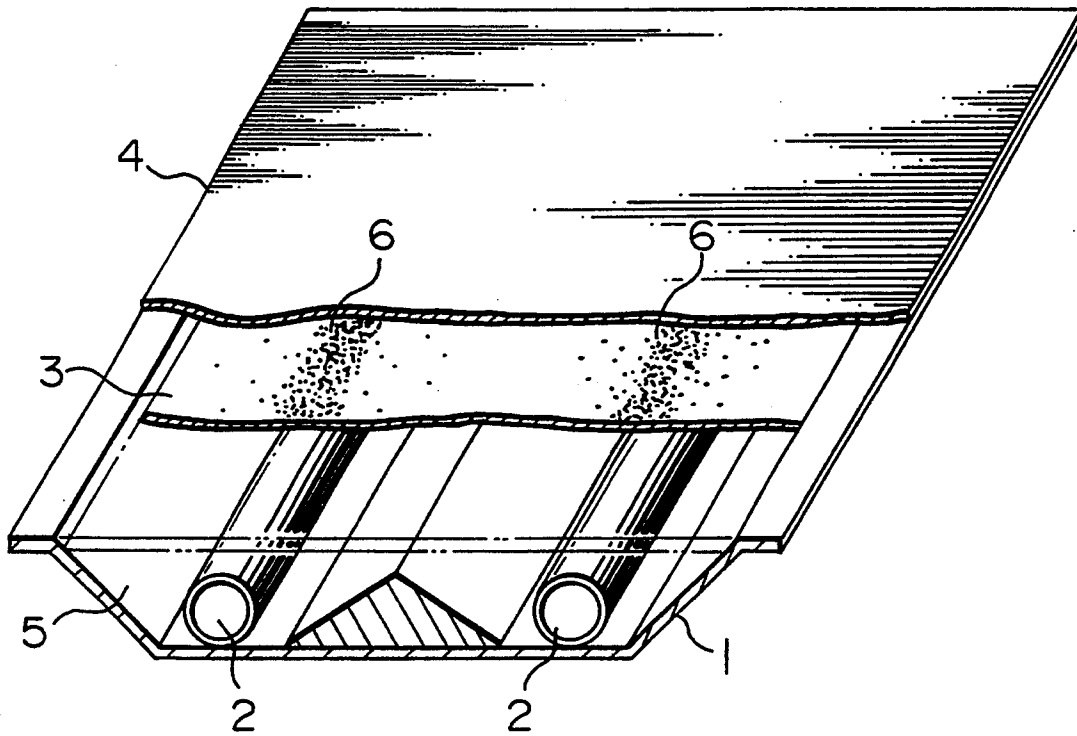


FIG. 5

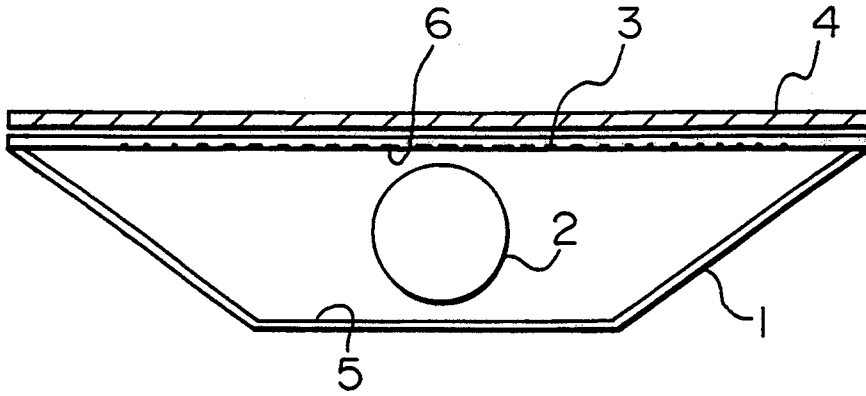


FIG. 6

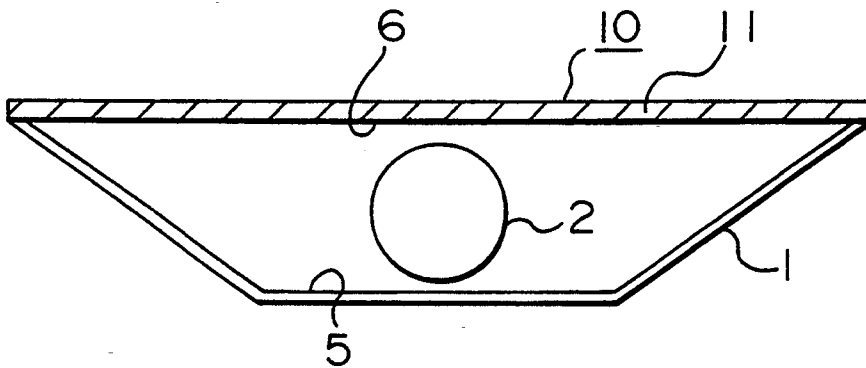
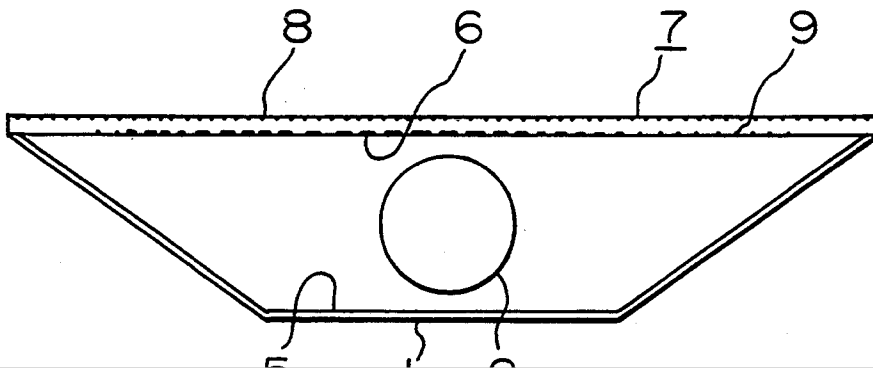


FIG. 7



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