United States Patent [19] Pristash et al. [54] THIN PANEL ILLUMINATOR [75] Inventors: David J. Pristash, Brecksville; Jeffery R. Parker, Concord, both of Ohio [73] Assignee: Lumitex, Inc., Cleveland, Ohio [21] Appl. No.: 309,424

Feb. 10, 1989

[51] Int. Cl.⁵ F21V 7/04

[22] Filed:

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[11]	Patent Number:	5,005,108
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[45]	Date	of	Patent:	Apr. 2	2, 1991
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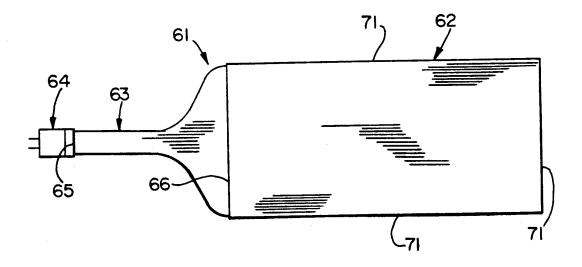
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Primary Examiner—Stephen F. Husar Assistant Examiner—Sue Hagarman Attorney, Agent, or Firm—Renner, Otto, Boisselle & Sklar

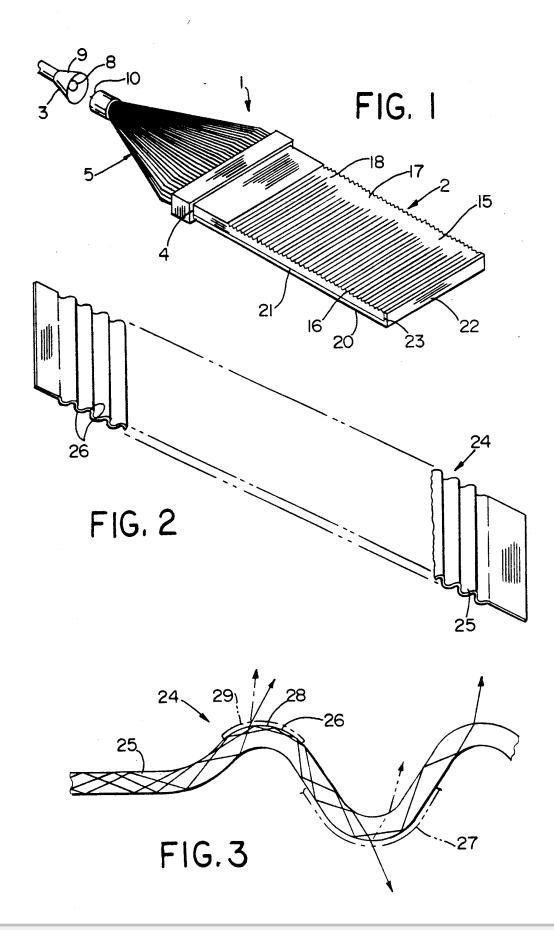
57] ABSTRACT

Thin panel illuminator includes a solid transparent panel member having one or more deformed output regions which cause light entering the panel along an input edge thereof to be emitted along the length of the panel. Light may be transmitted to one or more panel input edges from one or more light sources utilizing transition devices which convert easily focused light generally to the shape of the panel input surfaces.

76 Claims, 6 Drawing Sheets

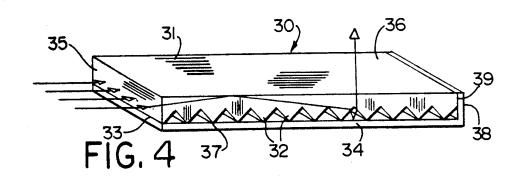


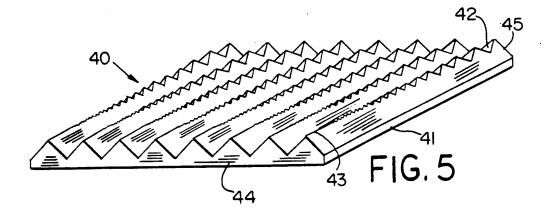
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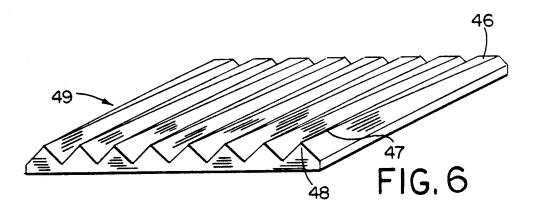


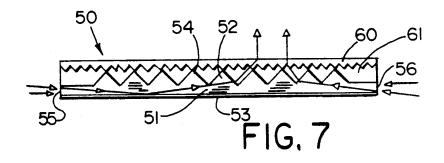


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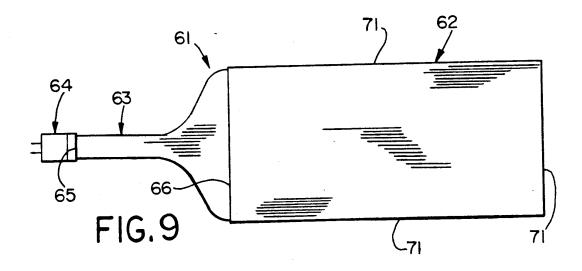




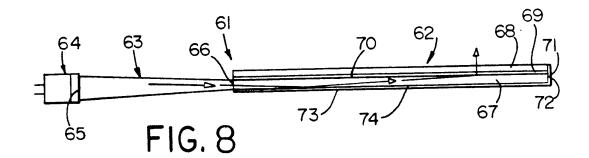


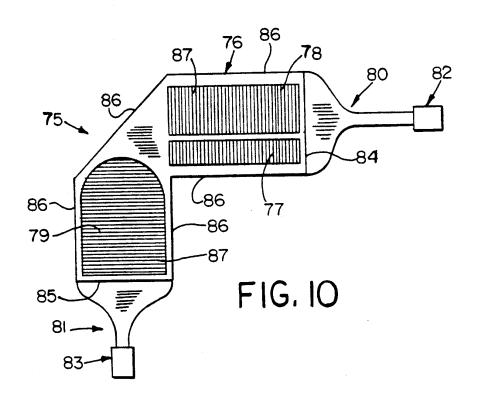


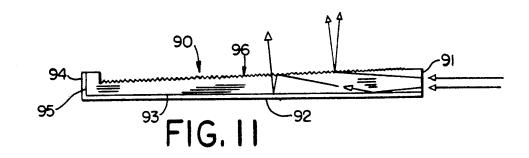




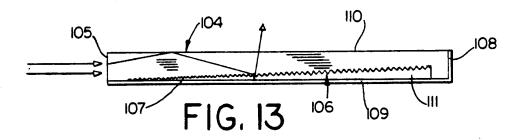
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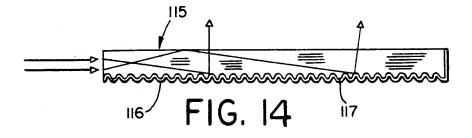


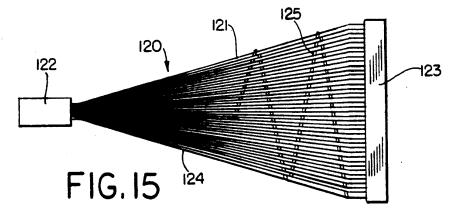














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