

[54] THIN PANEL ILLUMINATOR

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[73] Assignee: Lumitex, Inc., Cleveland, Ohio

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[51] Int. Cl.⁵ F21V 7/04

[52] U.S. Cl. 362/31; 362/32; 362/26

[58] Field of Search 362/26, 27, 31, 32

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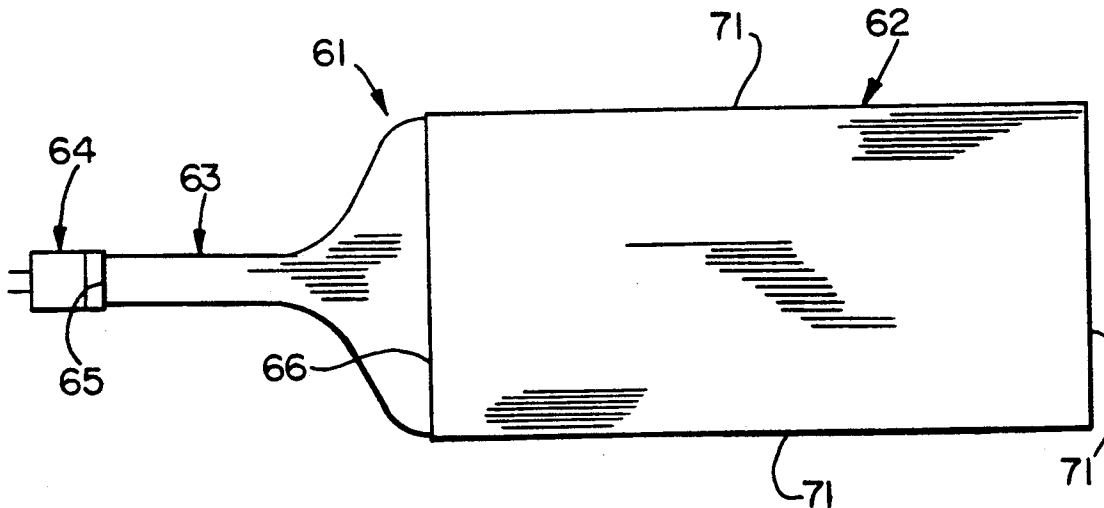
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Assistant Examiner—Sue Hagarman
Attorney, Agent, or Firm—Renner, Otto, Boisselle & Sklar

[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



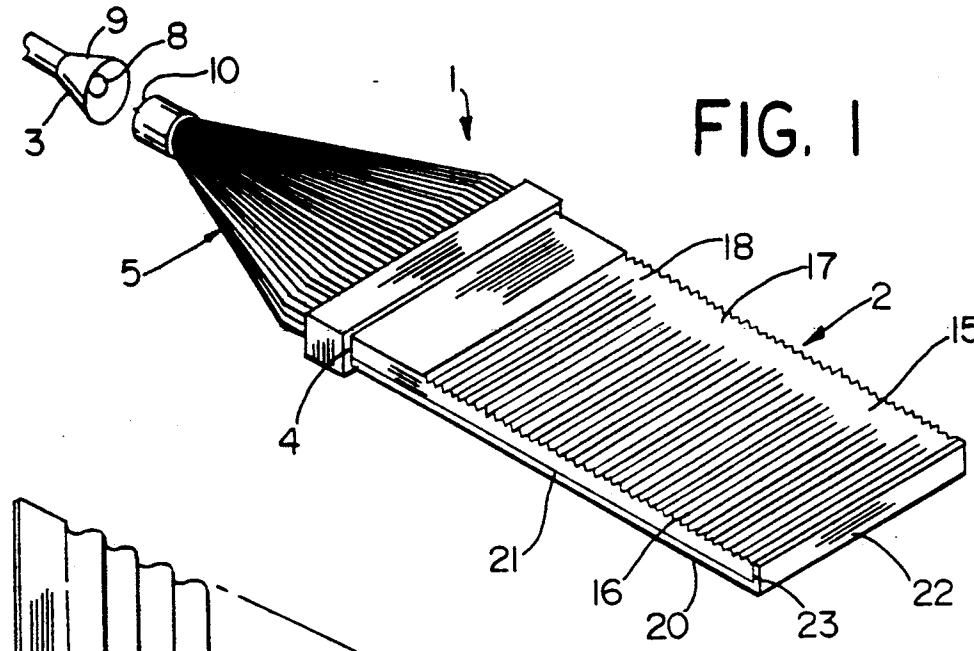


FIG. 1

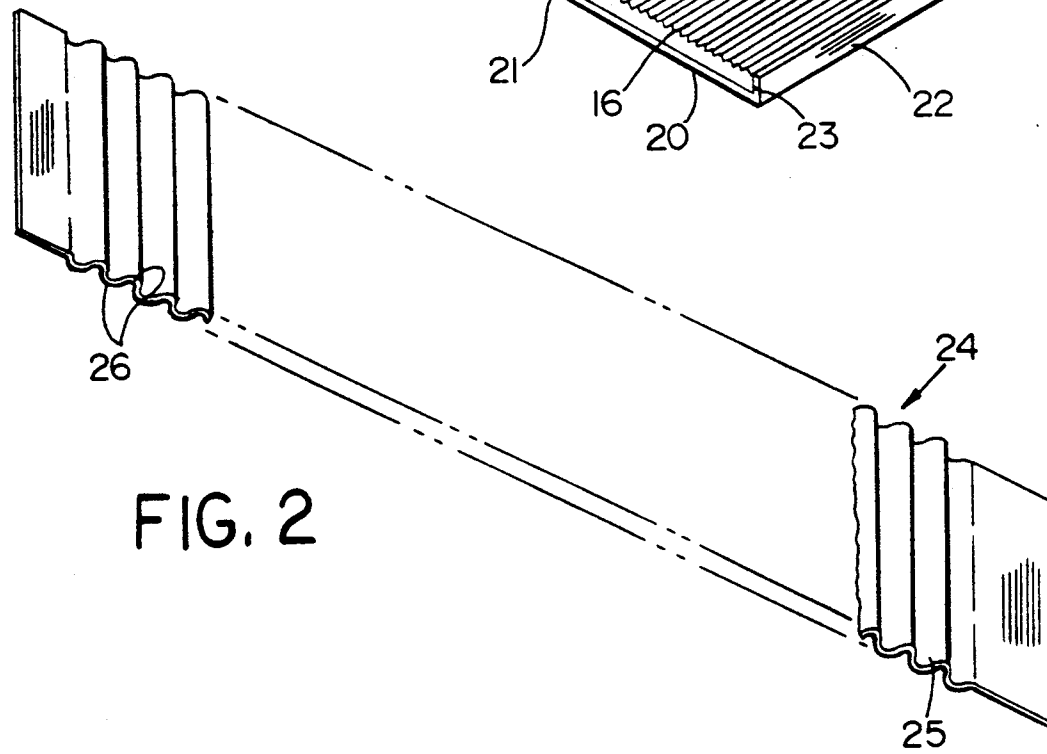


FIG. 2

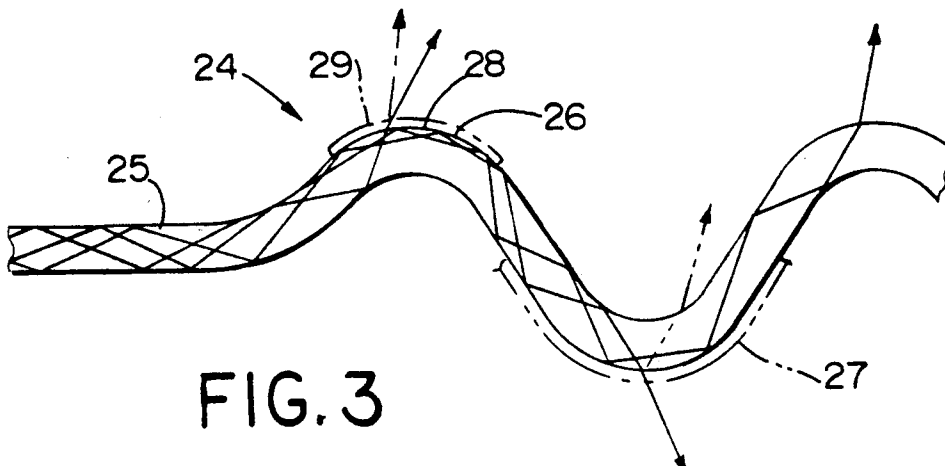
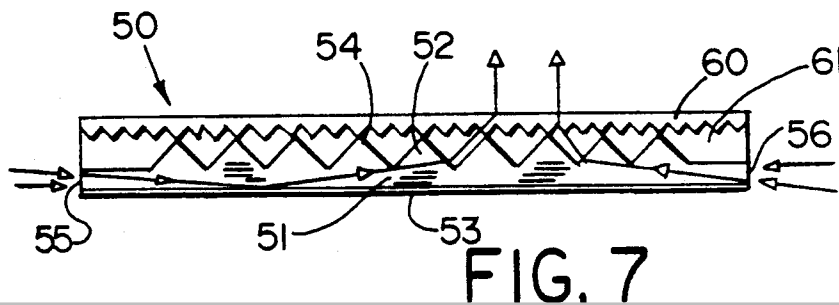
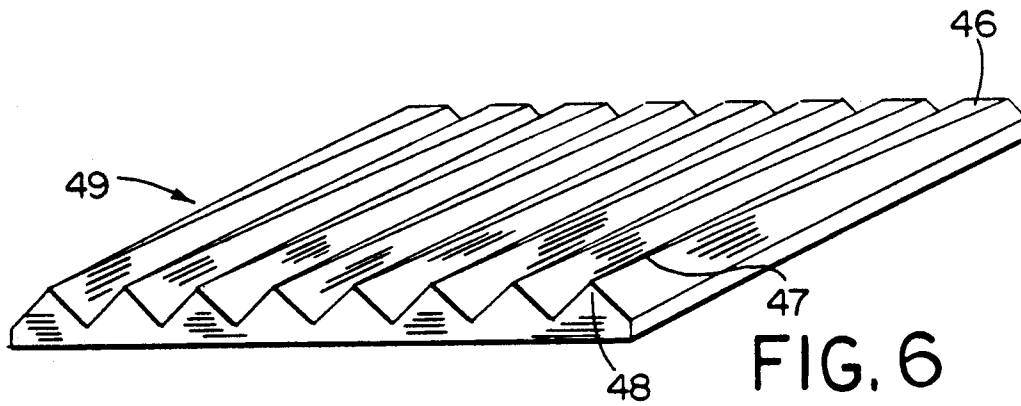
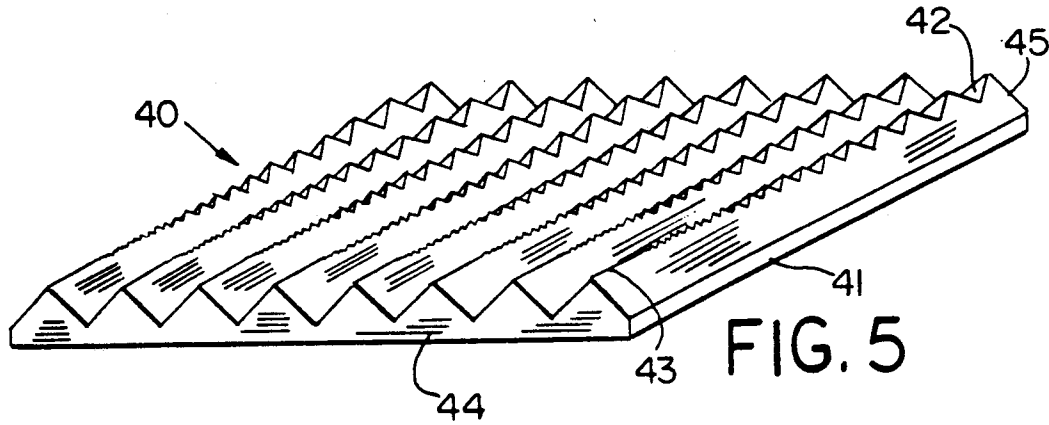
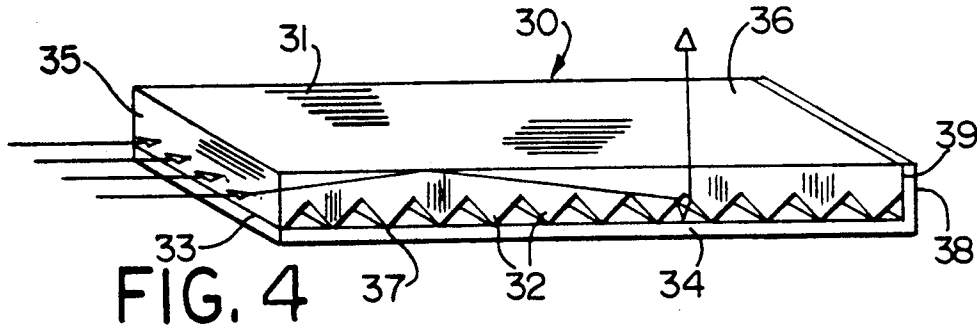


FIG. 3



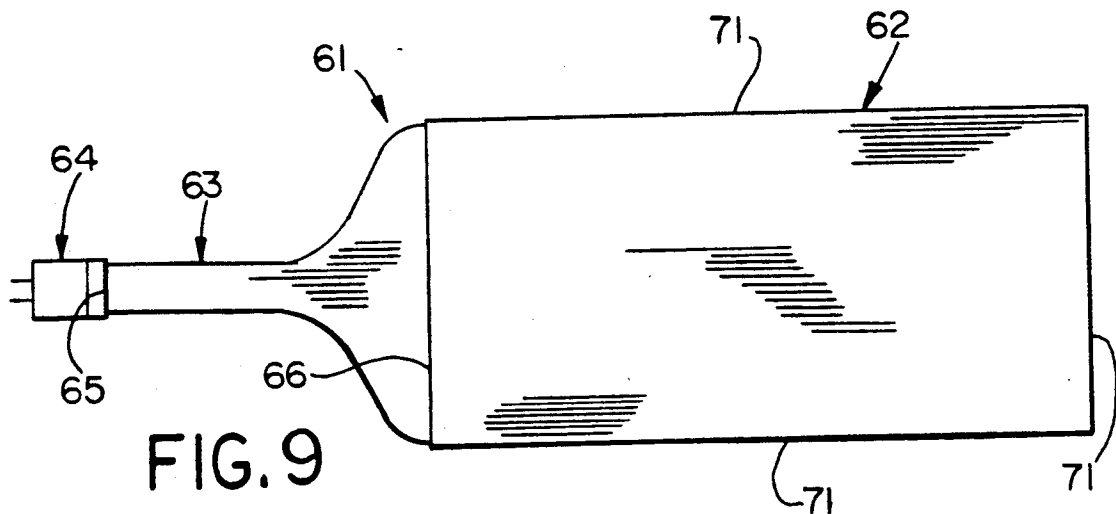


FIG. 9

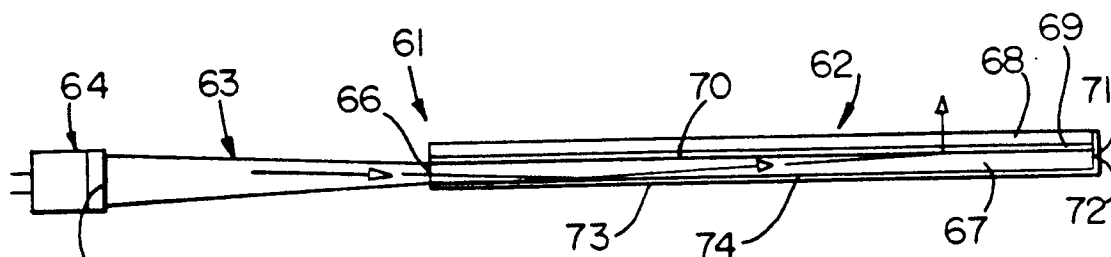


FIG. 8

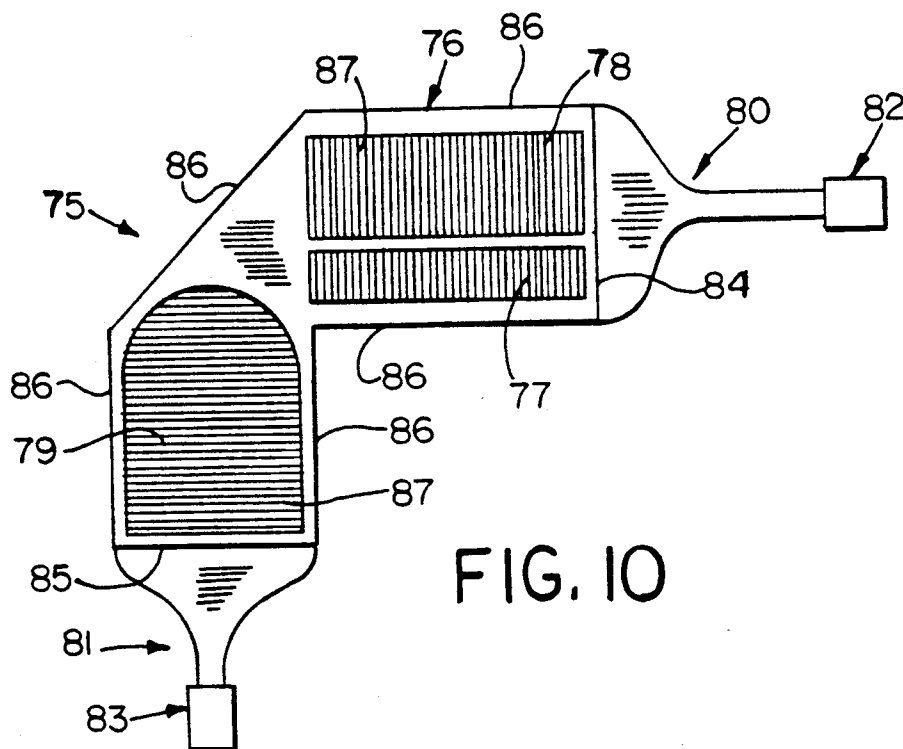


FIG. 10

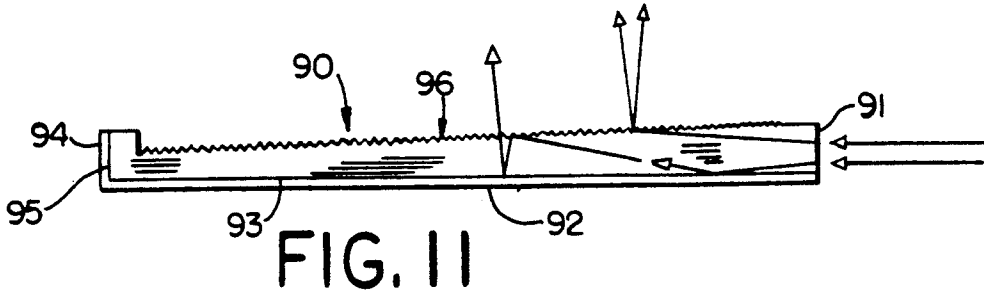


FIG. 11

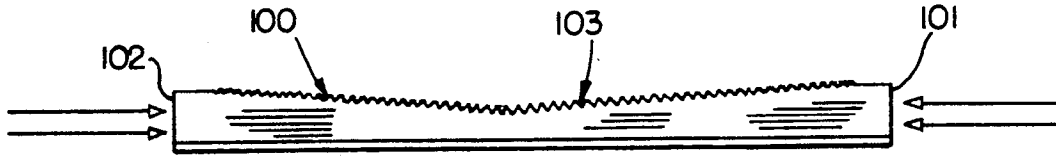


FIG. 12

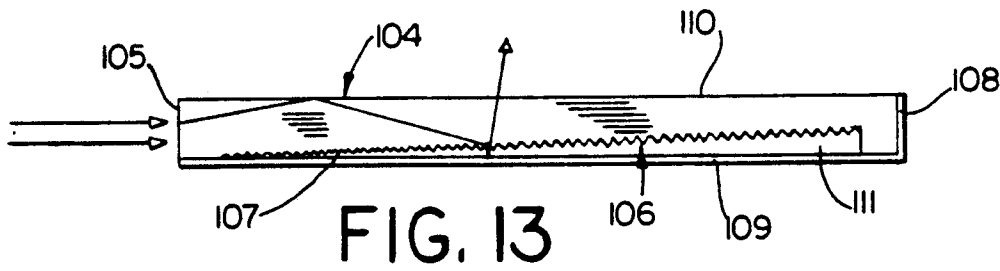


FIG. 13

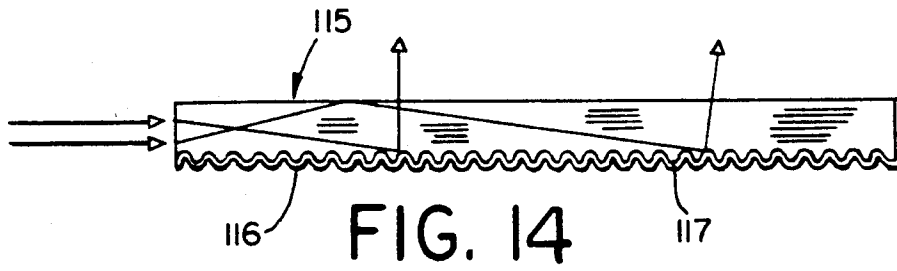


FIG. 14

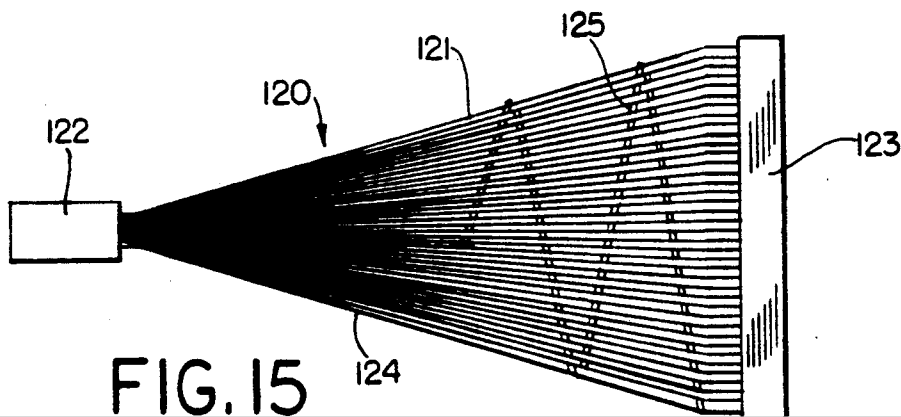


FIG. 15

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