### United States Patent [19] Pristash et al. [54] THIN PANEL ILLUMINATOR [75] Inventors: David J. Pristash, Brecksville; Jeffery R. Parker, Concord, both of [73] Assignee: Lumitex, Inc., Cleveland, Ohio [21] Appl. No.: 309,424 [22] Filed: Feb. 10, 1989 [51] Int. Cl.<sup>5</sup> ..... F21V 7/04 [52] **U.S. Cl.** ...... 362/31; 362/32; 362/26 [58] Field of Search ...... 362/26, 27, 31, 32 [56] References Cited U.S. PATENT DOCUMENTS 2,480,178 8/1949 Zinberg ...... 350/96.10

3,760,179 9/1973 Addington, Jr. ...... 40/546

3,781,537 12/1973 Ramsey ....... 362/32

 4,257,084
 3/1981
 Reynolds
 362/27

 4,323,951
 4/1982
 Pasco
 362/31

 4,373,282
 2/1983
 Wragg
 350/126

Albinger, Jr. ...... 362/32

7/1962

3,043,947

4,519,017	5/1985	Daniel .	
4,677,531	6/1987	Szeles	362/32
4,729,067	3/1988	Ohe	362/31
4,761,047	8/1988	Mori	362/32
4,763,984	8/1988	Awai et al	362/32
4,765,701	8/1988	Cheslak .	
4,802,066	1/1989	Mori	362/31
4,825,341	4/1989	Awai	362/32

5,005,108

Apr. 2, 1991

Primary Examiner—Stephen F. Husar Assistant Examiner—Sue Hagarman Attorney, Agent, or Firm—Renner, Otto, Boisselle & Sklar

#### [57] ABSTRACT

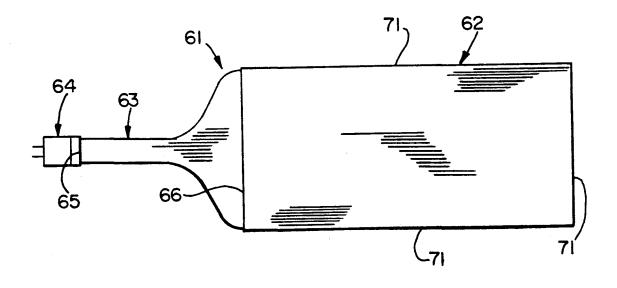
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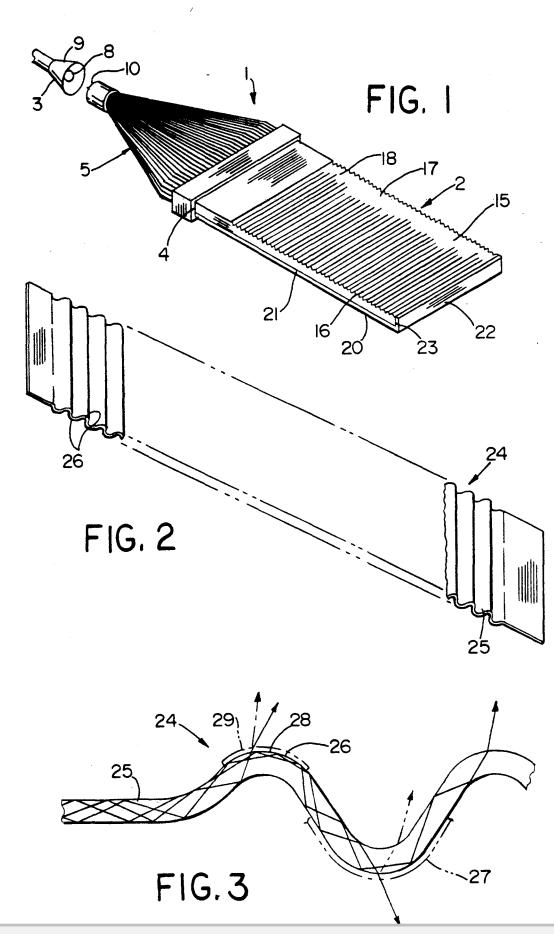
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Thin panel illuminator includes a solid transparent panel member having one or more deformed output regions which cause light entering the panel along an input edge thereof to be emitted along the length of the panel. Light may be transmitted to one 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.

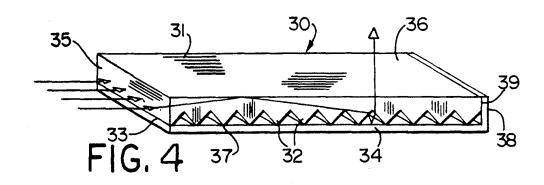
76 Claims, 6 Drawing Sheets



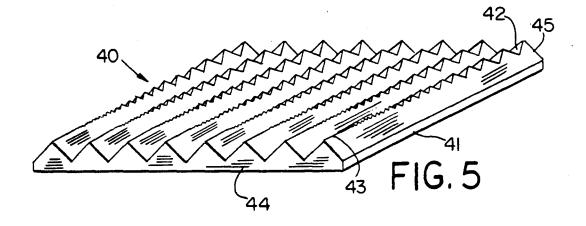


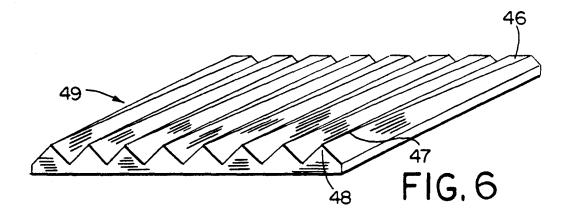


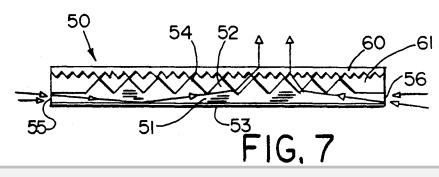




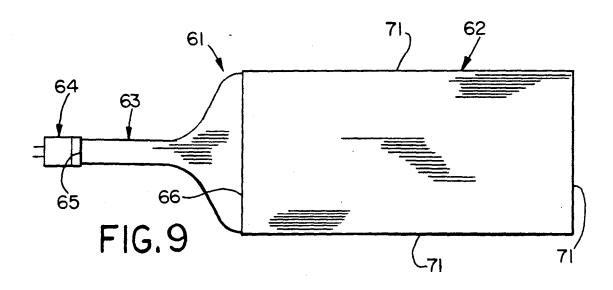
Apr. 2, 1991

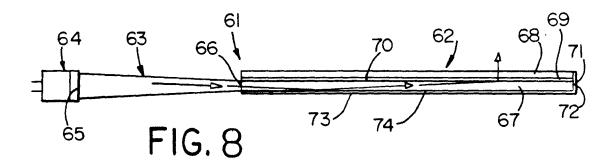


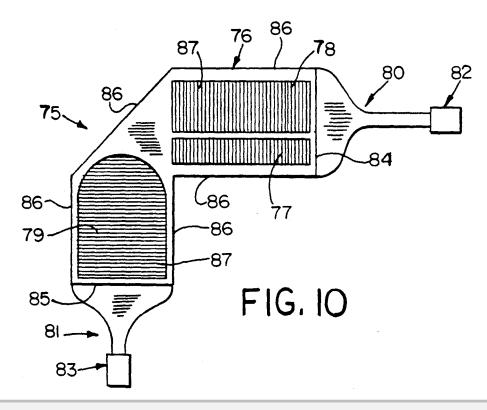




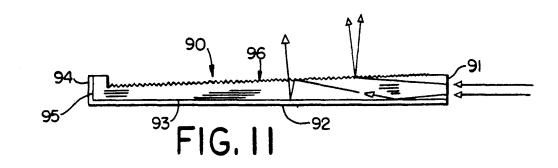




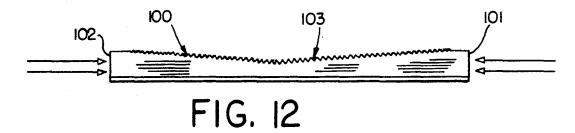


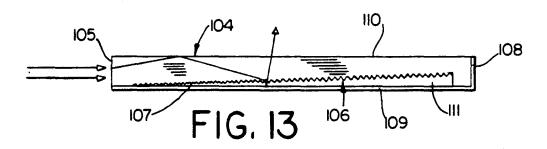


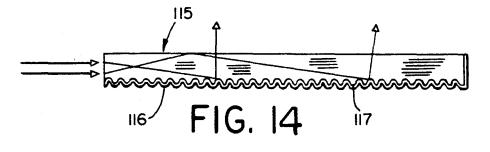


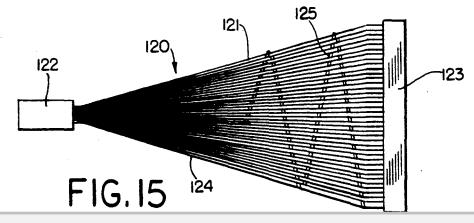


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