



US00D446946B1

(12) **United States Design Patent**
Shusta et al.

(10) **Patent No.:** **US D446,946 S**

(45) **Date of Patent:** **** Aug. 28, 2001**

(54) **GLITTERING RETROREFLECTIVE SHEETING**

Primary Examiner—Robert M. Spear

(74) *Attorney, Agent, or Firm*—Rudolph P. Hofmann, Jr.

(75) **Inventors:** **Jeanine M. Shusta**, Mahtomedi; **Paul E. Marecki**, May Township, both of MN (US)

(57) **CLAIM**

The ornamental design for a glittering retroreflective sheeting, as shown and described.

(73) **Assignee:** **3M Innovative Properties Company**, St. Paul, MN (US)

DESCRIPTION

(**) **Term:** **14 Years**

FIG. 1 is a perspective view of a glittering retroreflective sheeting showing the new design. The speckling that is shown in this Figure and in FIG. 2 represents glitter that is displayed by the article when exposed to light. The terms “glitter” or “glittering” are used herein to mean a multiplicity of discrete regions of light that appear as distinct points of light, each of which may be noticed by the unaided eye of an ordinary observer when light is incident on the sheeting, but which points of light disappear or become unnoticeable to the eye of the same observer when either the angle of the incident light source to the sheeting, the angle of observation, the sheeting’s orientation, or a combination thereof are changed. The term “retroreflective sheeting” means a sheeting that reflects substantial quantities of incident light—which light otherwise would be reflected elsewhere—back towards the light source.

(21) **Appl. No.:** **29/078,756**

(22) **Filed:** **Oct. 31, 1997**

(51) **LOC (7) Cl.** **05-06**

(52) **U.S. Cl.** **D5/99**

(58) **Field of Search** D5/22, 41, 47, D5/53, 57, 61, 62, 99; D29/101; 156/245; 264/1.1, 1.6, 1.9; 359/529, 530, 900; 428/40.1, 156, 199, 400, 904.4

FIG. 2 is a reduced scale top elevational view thereof.

FIG. 3 is a bottom elevational view thereof.

FIG. 4 is a front side elevational view thereof. The rear side elevational view is the same as the front side elevational view; and,

FIG. 5 is a left side elevational view thereof. The right side elevational view is the same as the left side elevational view.

In the drawings, the broken lines form no part of the claimed design and indicate that the glittering retroreflective sheeting has indeterminate length and width.

The combination of diagonal surface shading and stippling in FIGS. 1–2 represents a glittering reflective surface effect.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D. 51,421 * 10/1917 Norton D5/47

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

1 516 686 7/1978 (GB).

OTHER PUBLICATIONS

Page from Top Tape & Label Ltd. 96/97 Catalogue.

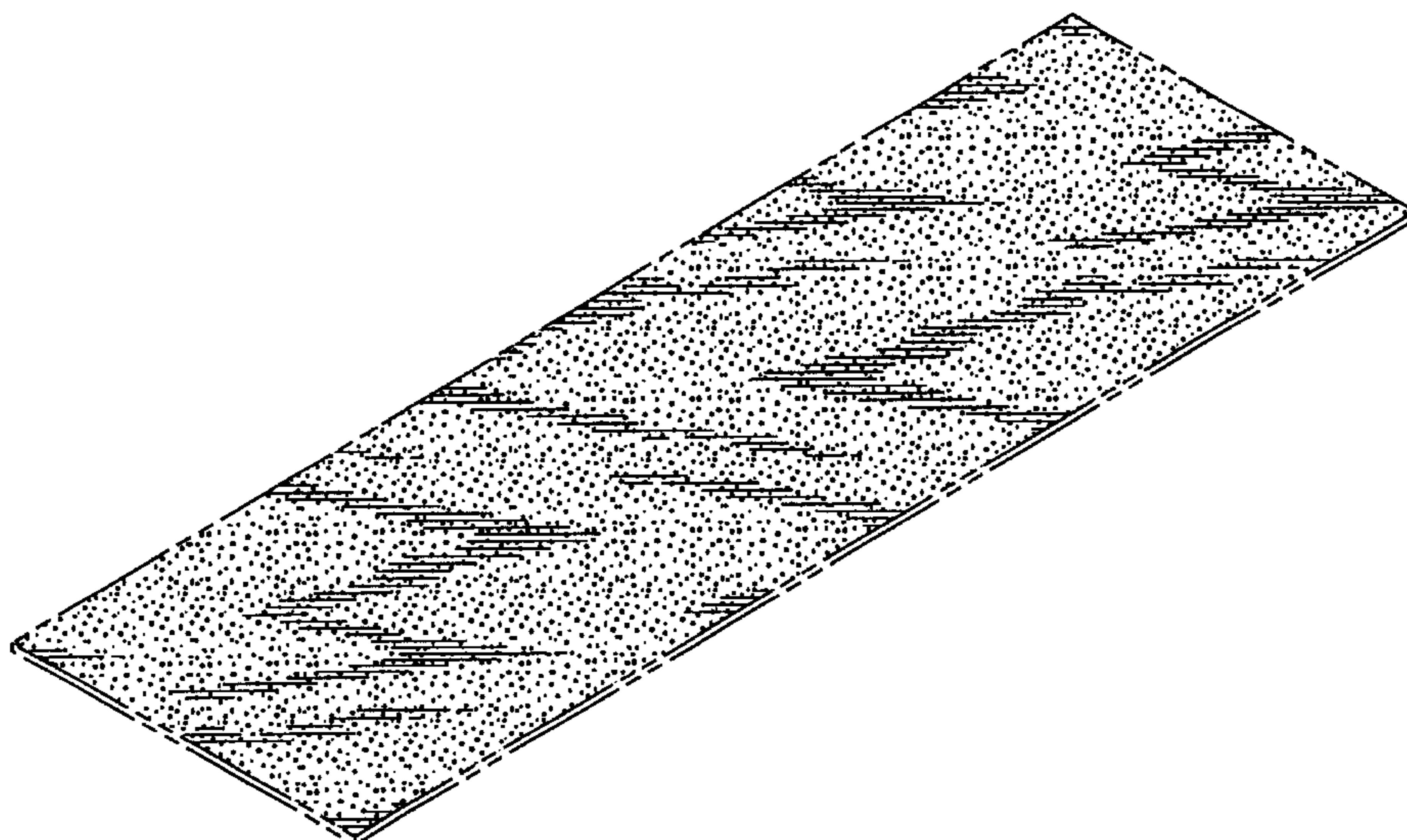
U.S. Design application No. 29/078,887, entitled *Glittering Cube–Corner Retroreflective Sheeting* filed Oct. 31, 1997.

U.S. application No. 08/640,326, entitled *Glittering Cube–Corner Retroreflective Sheeting* filed Apr. 30, 1996.

U.S. application No. 08/640,383, entitled *Mold For Producing Glittering Cube–Corner Retroreflective Sheeting* filed Apr. 30, 1996.

(List continued on next page.)

1 Claim, 2 Drawing Sheets



U.S. PATENT DOCUMENTS

D. 168,758	*	2/1953	Odzer	D5/53
D. 178,460	*	8/1956	McMord	D5/53
D. 188,161	*	6/1960	Martin	D5/41
D. 189,472	*	12/1960	Currie et al.	D5/41
D. 189,957	*	3/1961	Ellefson	D5/53
D. 190,360	*	5/1961	Cohen et al.	D5/41
D. 190,846	*	7/1961	Ellefson	D5/53
D. 195,252	*	5/1963	Nikolich	D5/41
D. 195,323	*	5/1963	Shortway et al.	D5/53
D. 235,489	*	6/1975	Spitz	D29/101
D. 300,693	*	4/1989	Grasso	D5/53
3,010,845		11/1961	Schornstheimer	117/71
3,047,875	*	8/1962	Patterson, Jr.	D29/101 X
3,469,898		9/1969	Altman .	
3,692,731		9/1972	McAdow	260/32.8 R
3,697,070		10/1972	McAdow	106/291
3,873,184		3/1975	Heenan .	
3,987,229		10/1976	Rairdon et al.	428/148
3,988,494		10/1976	McAdow	428/328
4,775,219		10/1988	Appeldorn et al. .	
4,938,563		7/1990	Nelson et al. .	
5,202,180		4/1993	Watts	428/324
5,276,075		1/1994	Santini	524/40
5,362,374		11/1994	Chang	205/164

5,450,235	9/1995	Smith et al.	359/529
5,470,058	11/1995	Sullivan et al.	273/65 B
5,759,468	6/1998	Smith et al. .	
5,763,049	6/1998	Frey et al. .	
5,770,124	6/1998	Marecki et al. .	
5,814,355	9/1998	Shusta et al. .	
5,840,405	11/1998	Shusta et al. .	
5,948,488	9/1999	Marecki et al. .	

OTHER PUBLICATIONS

U.S. application No. 08/641,126, entitled *Formed Ultra-Flexible Retroreflective Cube-Corner Composite Sheeting With Target Optical Properties And Method For Making Same* filed Apr. 30, 1996.

Traffic Vest No. WS-9811, Lab Safety Supply Safety Essentials Catalog, 1994 Fall/Winter Edition, p. 152, Oct. 1993.*

Vest W/ Scotchlite™ No. 05-200, Direct Safety Catalog, p. 193, Aug. 1995.*

Colorful Specialty Mesh Safety Vest No. 05-805, 806, & 807. Direct Safety Company 1996 Master Catalog, p. 75, Jun. 1996.*

* cited by examiner

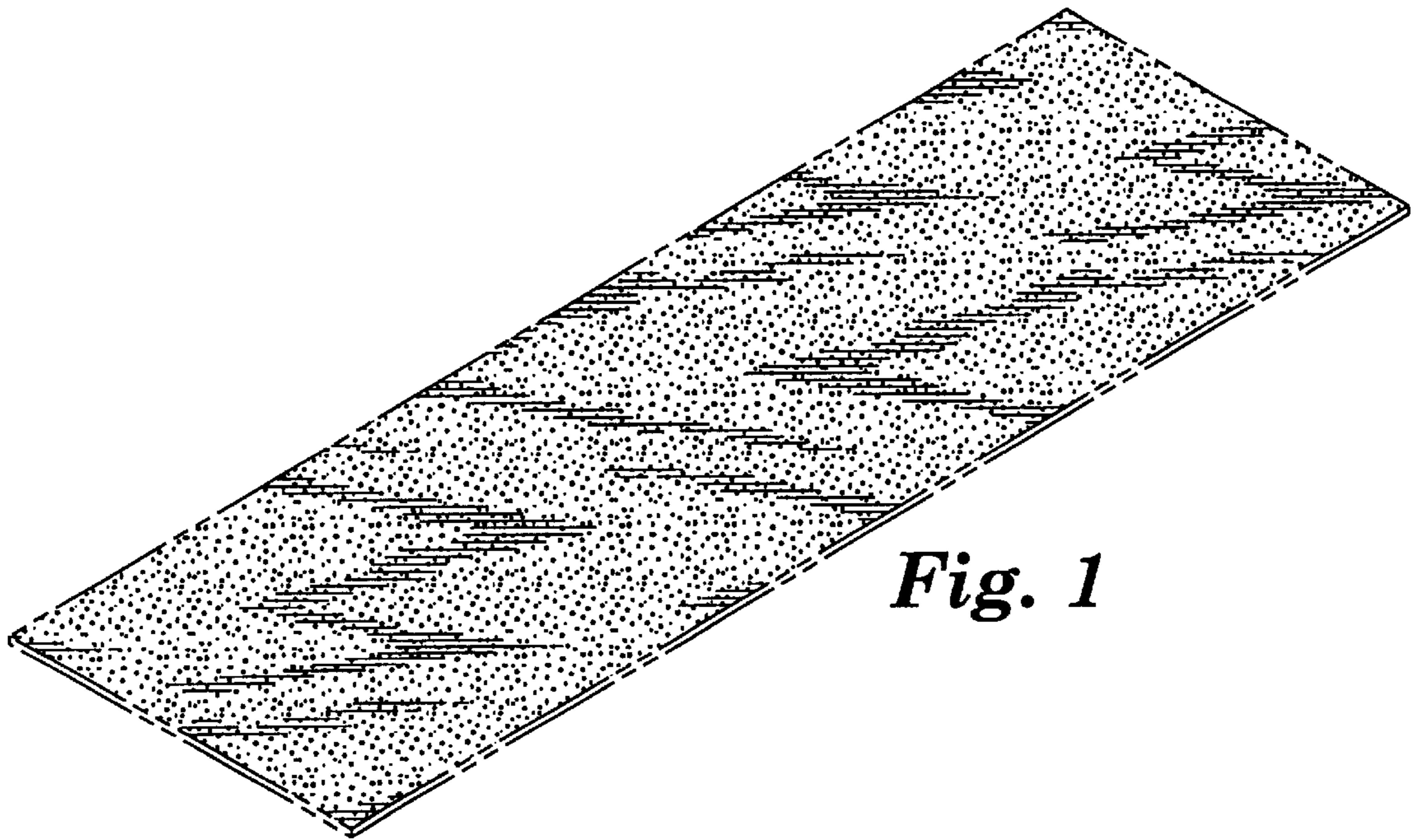


Fig. 1



Fig. 2

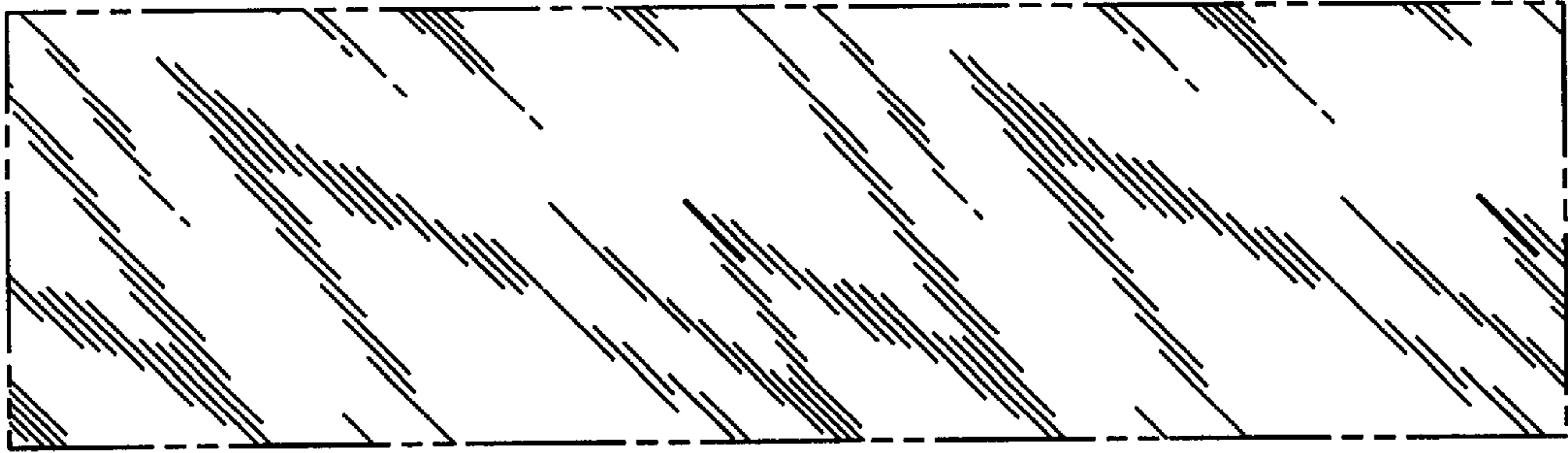


Fig. 3



Fig. 4

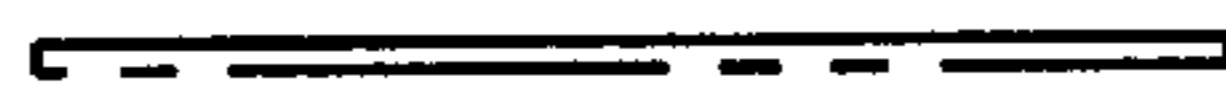


Fig. 5