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# United States Patent [19]

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Nestegard et al.

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- [54] **STRIPED SURFACE PATTERN FOR RETROREFLECTIVE SHEETING**
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- [73] Assignee: **Minnesota Mining and Manufacturing Company**, St. Paul, Minn.
- [\*\*] Term: **14 Years**

- 0 382 420 A2 8/1990 European Pat. Off. .
- 0 478 178 A1 4/1992 European Pat. Off. .
- 23 17 871.4 10/1974 Germany .
- 2 245 219 A 1/1992 United Kingdom .
- WO 92/04647 3/1992 WIPO .
- WO 94/19711 9/1994 WIPO .
- WO 95/03558 2/1995 WIPO .
- WO 95/07179 3/1995 WIPO .
- WO 95/11466 4/1995 WIPO .

- [21] Appl. No.: **49,168**
- [22] Filed: **Jan. 19, 1996**

- [51] **LOC (6) Cl.** ..... **05-06**
- [52] **U.S. Cl.** ..... **D5/99; D5/7; D5/60**
- [58] **Field of Search** ..... **D5/4, 47, 52-53, D5/58-61, 99; D6/582-3; D9/456; D25/138, 143-4, 157, 160-1, 164, 113, 121; 206/484.2, 819; 264/284; 359/529, 530.3; 405/19; 428/116, 118, 178, 180, 30, 72**

### OTHER PUBLICATIONS

Japanese Design Patent Application No. 50-29534, filed Jul. 15, 1975, Applicant Myodo Kinzoku K.K. (including English translation thereof).  
 A sample labeled "S1" of retroreflective sheeting believed to be offered for sale by Reflexite Corp. before Jan. 19, 1995.  
 A sample labeled "S2" of retroreflective sheeting believed to be offered for sale by Stimsonite Corp. before Jan. 19, 1995.  
 A sample labeled "S3" of retroreflective sheeting believed to be offered for sale by Stimsonite Corp. before Jan. 19, 1995.  
 A sample labeled "S4" of retroreflective sheeting believed to be offered for sale by 3M Company before Jan. 19, 1995.  
 Yoder, P.R. Jr., "Study of Light Deviation Errors in Triple Mirrors and Tetrahedral Prisms," *J. Optical Soc. of America*, vol. 48, No. 7, Jul. 1959, pp. 496-499.

### [56] References Cited

#### U.S. PATENT DOCUMENTS

- D. 130,864 12/1941 Abt ..... D5/47
- D. 168,422 12/1952 Rose ..... D5/60
- D. 363,611 10/1995 Nakamura ..... D5/60
- D. 366,763 2/1996 Sargent et al. .... D5/60
- 3,190,178 6/1965 McKenzie ..... 88/82
- 3,450,459 6/1969 Haggerty ..... 350/103
- 3,632,695 1/1972 Howell ..... 264/1
- 3,684,348 8/1972 Rowland ..... 350/103
- 3,689,346 9/1972 Rowland ..... 156/245
- 3,700,305 10/1972 Bingham ..... 305/105
- 3,712,706 1/1973 Stamm ..... 350/103
- 3,810,804 5/1974 Rowland ..... 156/245
- 3,811,983 5/1974 Rowland ..... 156/245
- 3,830,682 8/1974 Rowland ..... 161/2
- 3,924,929 12/1975 Holmen et al. .... 350/103
- 3,926,402 12/1975 Heenan et al. .... 249/117

(List continued on next page.)

#### FOREIGN PATENT DOCUMENTS

- 0 175 031 A1 3/1986 European Pat. Off. .
- 0 200 521 11/1986 European Pat. Off. .

(List continued on next page.)

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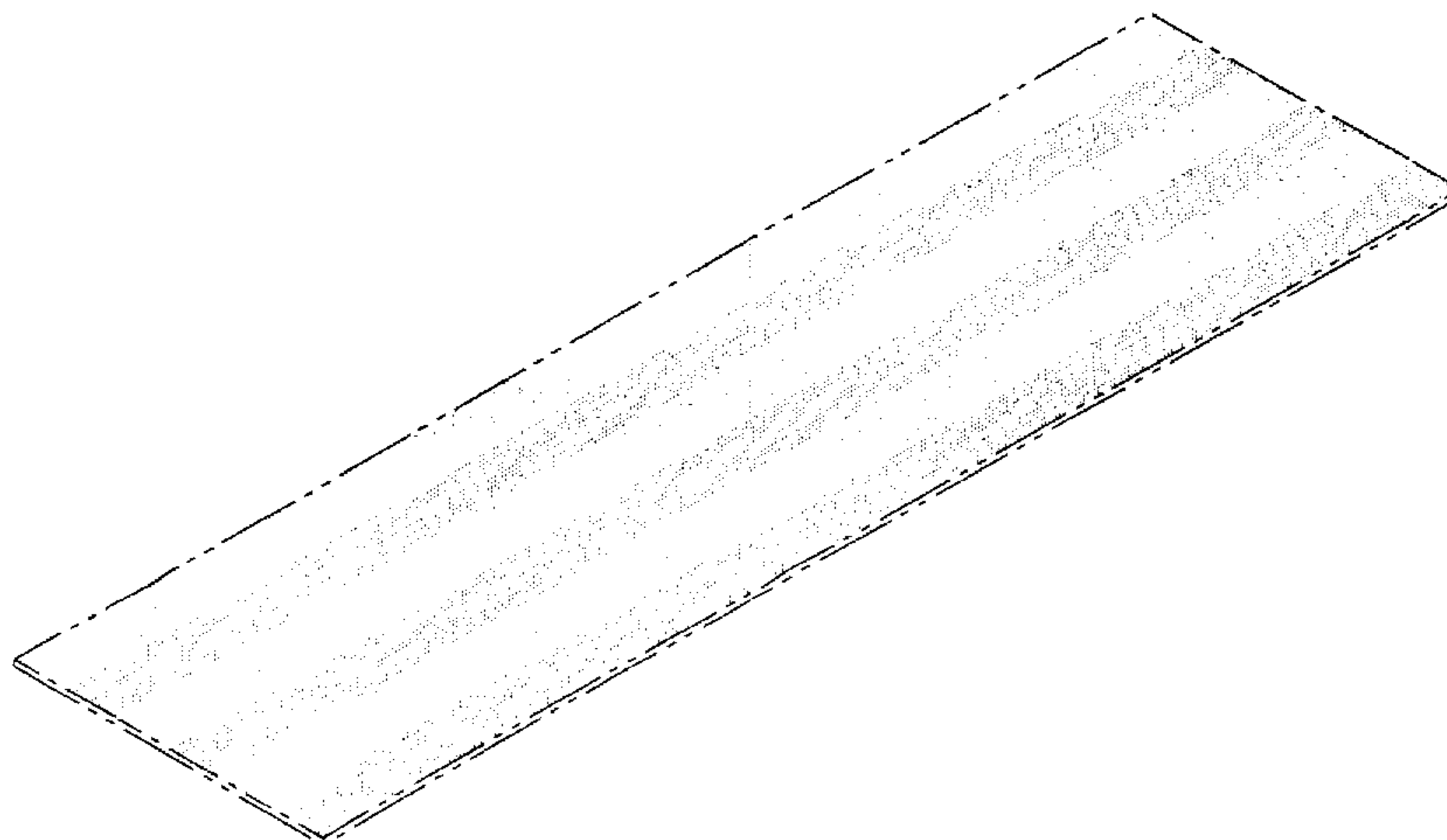
### [57] CLAIM

The ornamental design for a striped surface pattern for retroreflective sheeting, as shown and described.

### DESCRIPTION

FIG. 1 is a perspective view of a striped surface pattern for retroreflective sheeting, showing our new design;  
 FIG. 2 is a top plan view thereof; and,  
 FIG. 3 is an enlarged fragmentary top plan view thereof.  
 The broken lines in the drawings depict the boundaries of the retroreflective sheeting and form no part of the claimed design.

**1 Claim, 3 Drawing Sheets**



## U.S. PATENT DOCUMENTS

3,935,359	1/1976	Rowland	428/172
3,992,080	11/1976	Rowland	350/103
4,025,159	5/1977	McGrath	350/105
4,066,236	1/1978	Lindner	249/160
4,066,331	1/1978	Lindner	350/103
4,202,600	5/1980	Burke et al.	350/103
4,243,618	1/1981	Van Arnam	264/1
4,332,847	6/1982	Rowland	428/156
4,349,598	9/1982	White	428/161
4,414,316	11/1983	Conley	430/496
4,486,363	12/1984	Pricone et al.	264/1.4
4,555,161	11/1985	Rowland	350/103
4,576,850	3/1986	Martens	428/156
4,582,885	4/1986	Barber	528/28
4,588,258	5/1986	Hoopman	350/103
4,601,861	7/1986	Pricone et al.	264/1.6
4,668,558	5/1987	Barber	428/156
4,775,219	10/1988	Appeldorn et al.	350/103
4,801,193	1/1989	Martin	350/103
4,895,428	1/1990	Nelson et al.	350/103
4,938,563	7/1990	Nelson et al.	350/103
5,035,929	7/1991	Myers et al.	428/30
5,066,098	11/1991	Kult et al.	359/540
5,077,117	12/1991	Harper et al.	428/143
5,117,304	5/1992	Huang et al.	359/529
5,138,488	8/1992	Szzech	359/529
5,175,030	12/1992	Lu et al.	428/30

5,183,597	2/1993	Lu	264/1.4
5,189,553	2/1993	Smith	359/530
5,213,872	5/1993	Pricone et al.	428/195
5,229,882	7/1993	Rowland	359/530
5,236,751	8/1993	Martin et al.	428/40
5,264,063	11/1993	Martin	156/247
5,272,562	12/1993	Coderre	359/529
5,360,659	11/1994	Arends et al.	428/30
5,376,431	12/1994	Rowland	428/164
5,450,235	9/1995	Smith et al.	359/529

## OTHER PUBLICATIONS

Priola, A., et al., *Proceedings of the XIII International Conference in Organic Coatings Science and Technology*, Athens, Greece, Jul. 7-11, 1987, pp. 308-18.

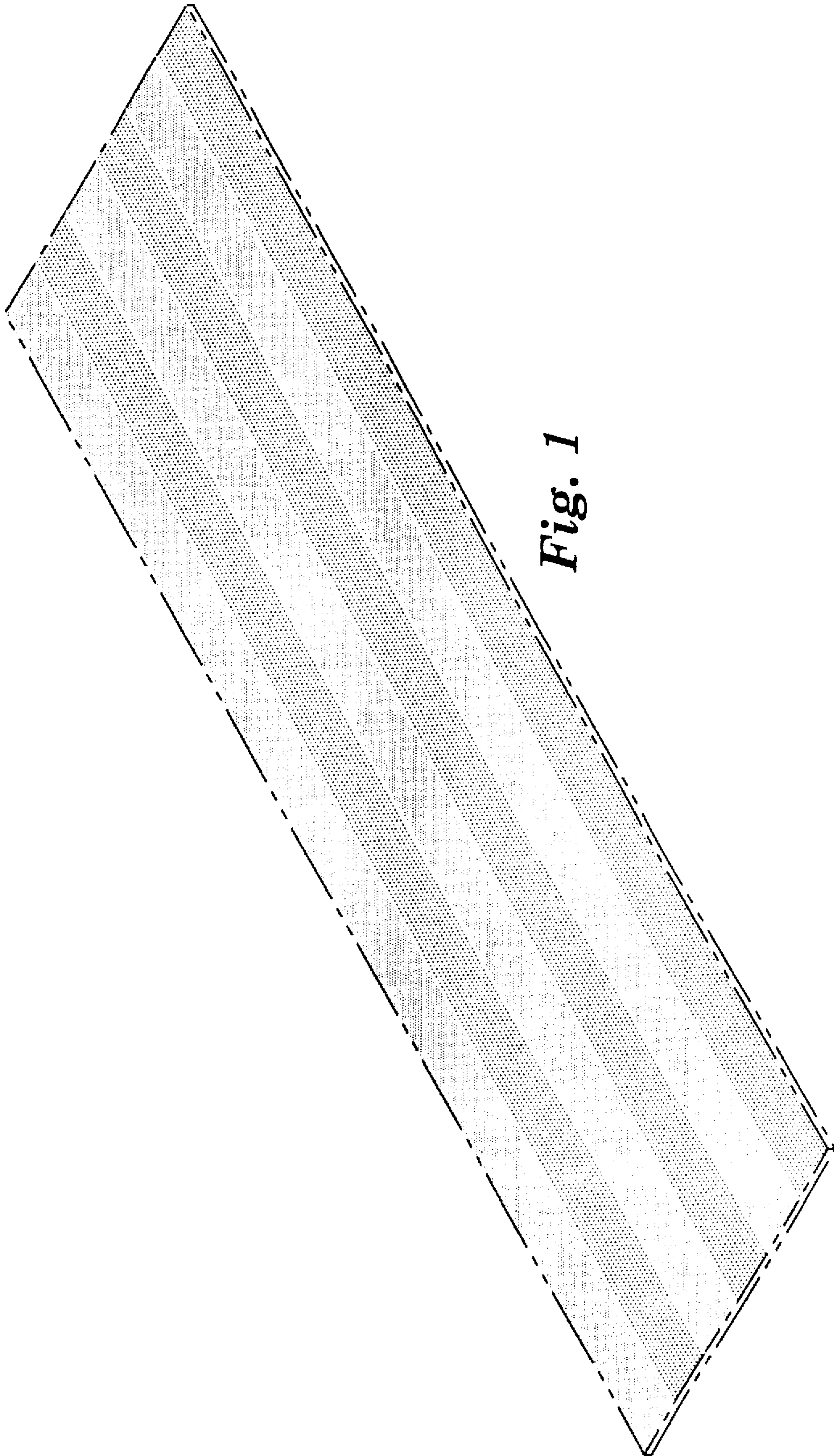
Technical Report No. 9077 of Reflexite Retroreflective Sheeting Product.

Finster, Schmidt-Clausen, "Optimum Identification of Trucks for Real Traffic Situations", Report on Research Proj. 1.9103 of the Fed. Hwys. Agency, Apr. 1992.

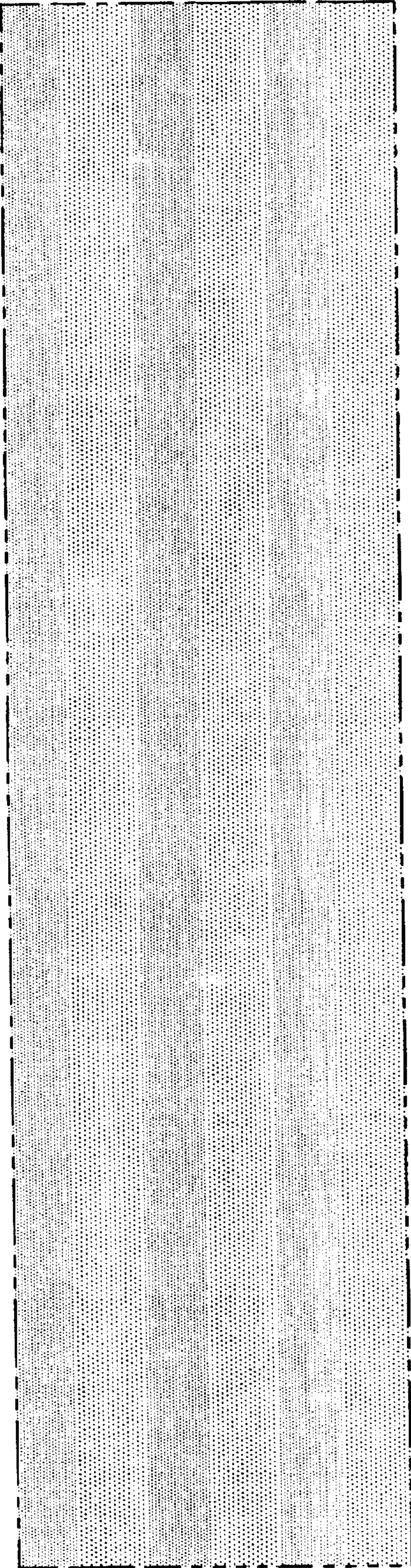
Leighton, J. et al., "RF Welding of PVC and Other Thermoplastic Compounds." *ANTEC*, 1992, pp. 724-728.

Technical Report No. 9078 of Reflexite Super Bright Brand Reflective Fabric.

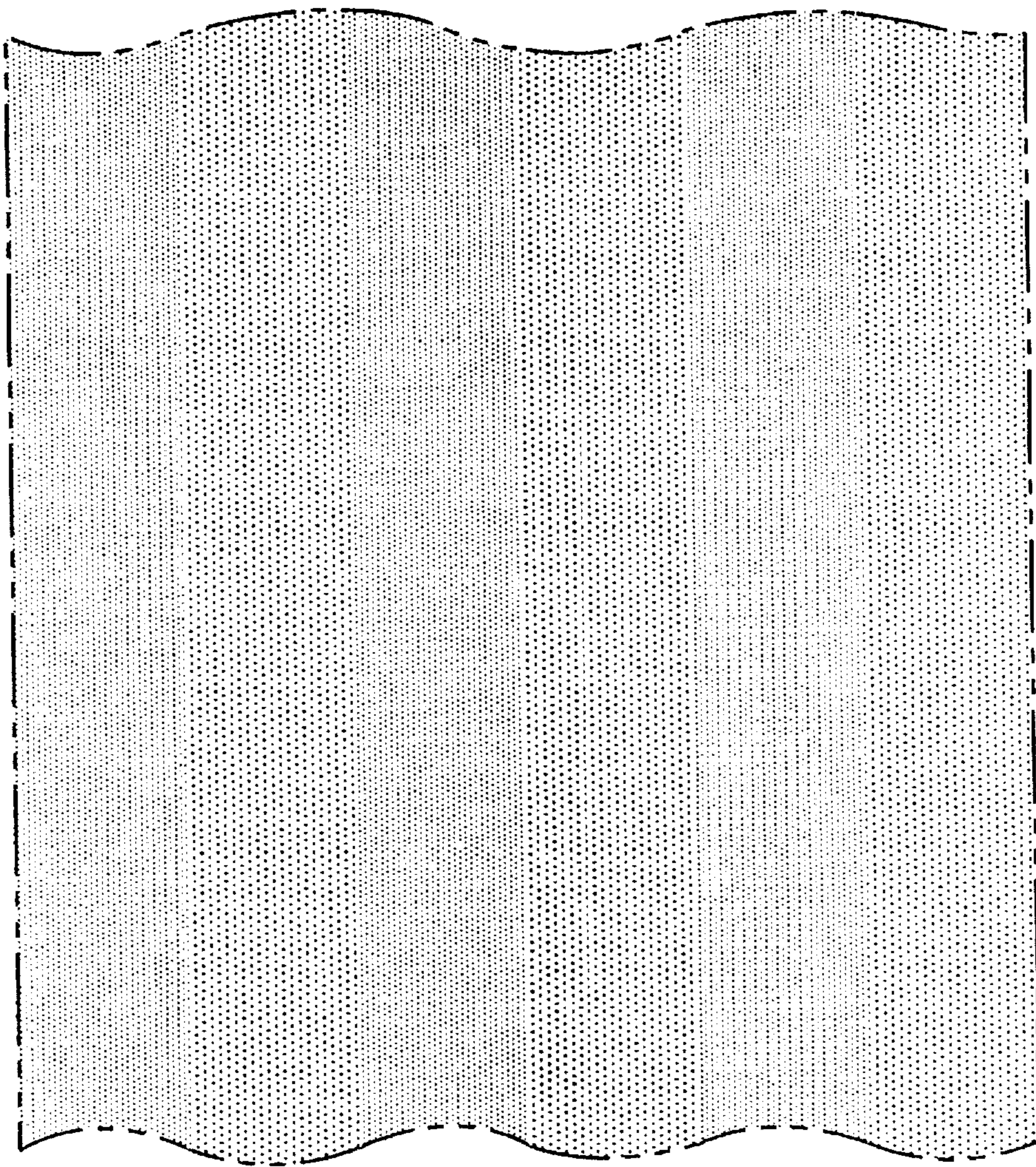
Copending application Ser. No. 08/587,719, filed Jan. 19, 1996.



*Fig. 1*



*Fig. 2*



*Fig. 3*