



US00D411618S

# United States Patent [19]

**Mariant et al.**

[11] **Patent Number: Des. 411,618**

[45] **Date of Patent: \*\* Jun. 29, 1999**

[54] **SPIRAL VASO-OCCLUSION COIL**

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[73] Assignee: **Target Therapeutics, Inc.**, Fremont, Calif.

[\*\*] Term: **14 Years**

[21] Appl. No.: **29/071,249**

[22] Filed: **May 23, 1997**

### Related U.S. Application Data

[62] Division of application No. 29/037,001, Mar. 31, 1995.

[51] **LOC (6) Cl.** ..... **24-02**

[52] **U.S. Cl.** ..... **D24/143**

[58] **Field of Search** ..... D24/155, 143, D24/169, 151; 606/191, 198, 200, 194; 604/104, 96, 164; 623/1, 11, 12

### [56] References Cited

#### U.S. PATENT DOCUMENTS

2,359,128	9/1944	Lieboff .	
4,994,069	2/1991	Ritchart et al. ....	606/191
5,197,978	3/1993	Hess .....	606/194
5,226,911	7/1993	Chee et al. ....	606/191

5,304,194	4/1994	Chee et al. ....	606/191
5,334,210	8/1994	Gianturco .....	606/151
5,382,259	1/1995	Phelps et al. ....	606/191
5,413,560	5/1995	Solar .....	604/164
5,476,472	12/1995	Dormandy, Jr. et al. ....	606/151

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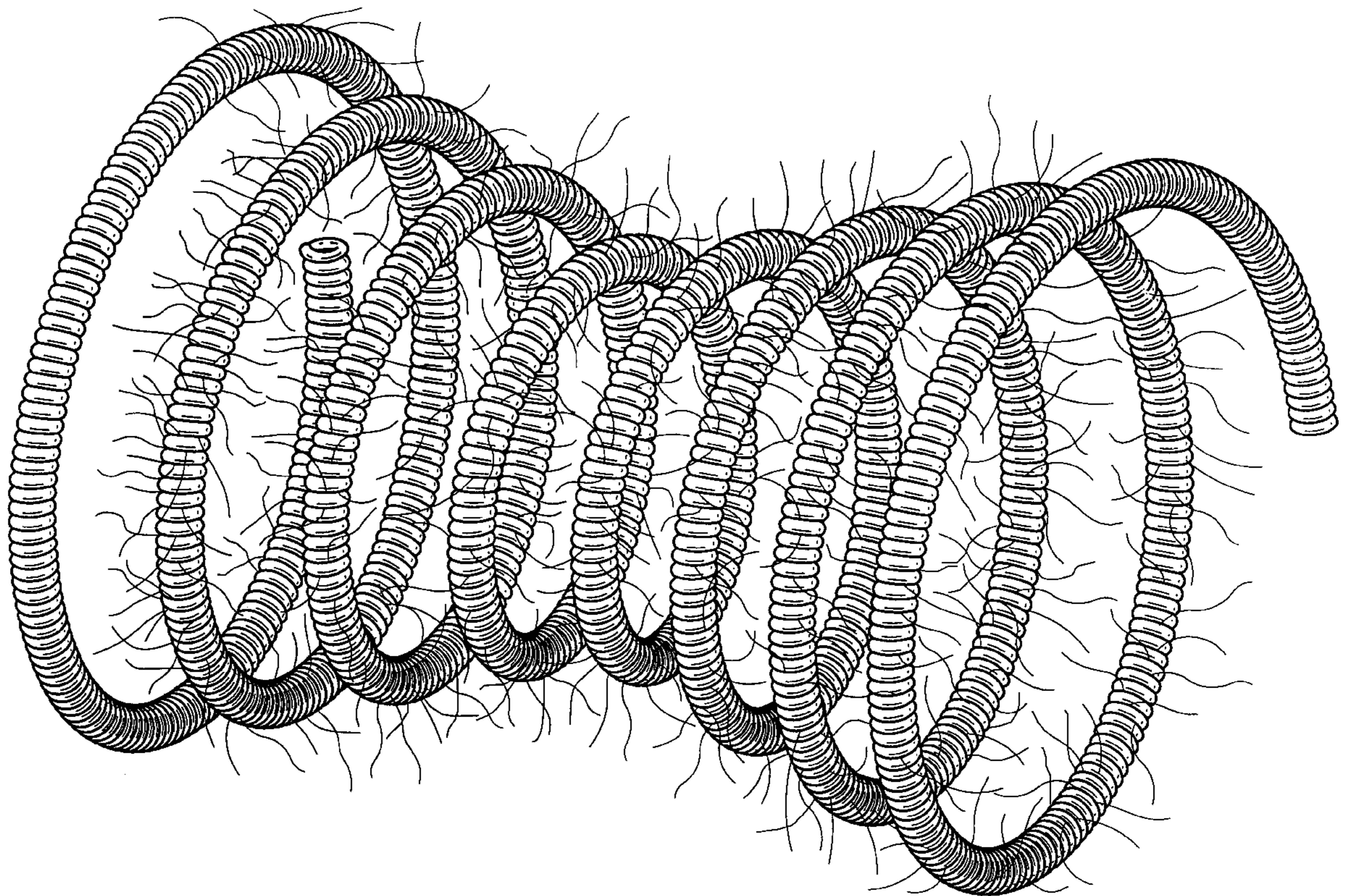
### [57] CLAIM

The ornamental design for a spiral vaso-occlusive coil, as shown and described.

### DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of the spiral vaso-occlusion coil embodying my new design; FIG. 2 is a top plan view thereof; FIG. 3 is a right side elevational view thereof; FIG. 4 is a left side elevational view thereof; FIG. 5 is a front elevational view thereof; FIG. 6 is a rear elevational view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is a perspective view of a second embodiment of FIG. 1, the only difference from the first embodiment being the arrangement of fibers; and, FIG. 9 is a perspective view of a third embodiment of FIG. 1, the only difference from the first two embodiments being the arrangement of fibers.

**1 Claim, 9 Drawing Sheets**



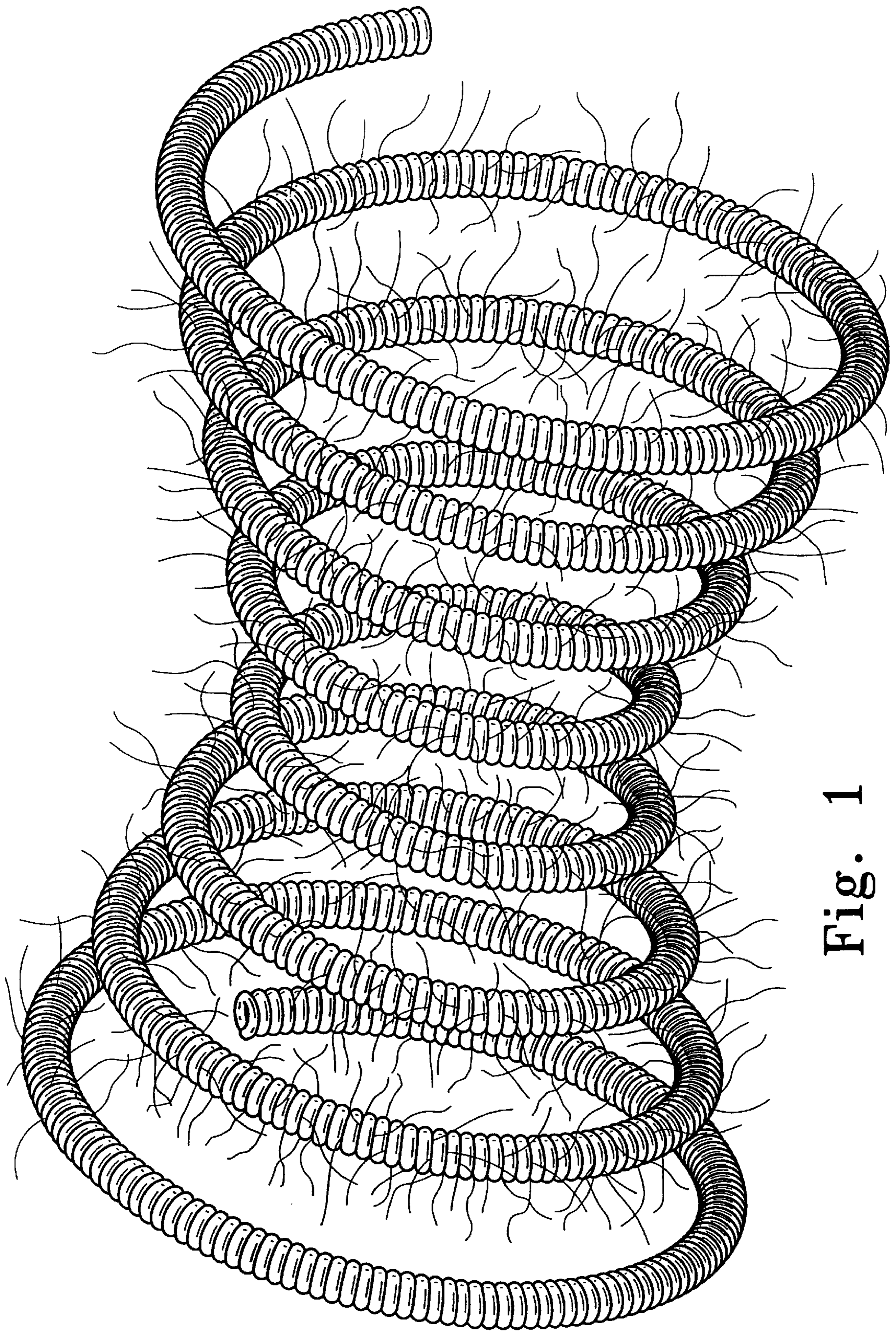


Fig. 1

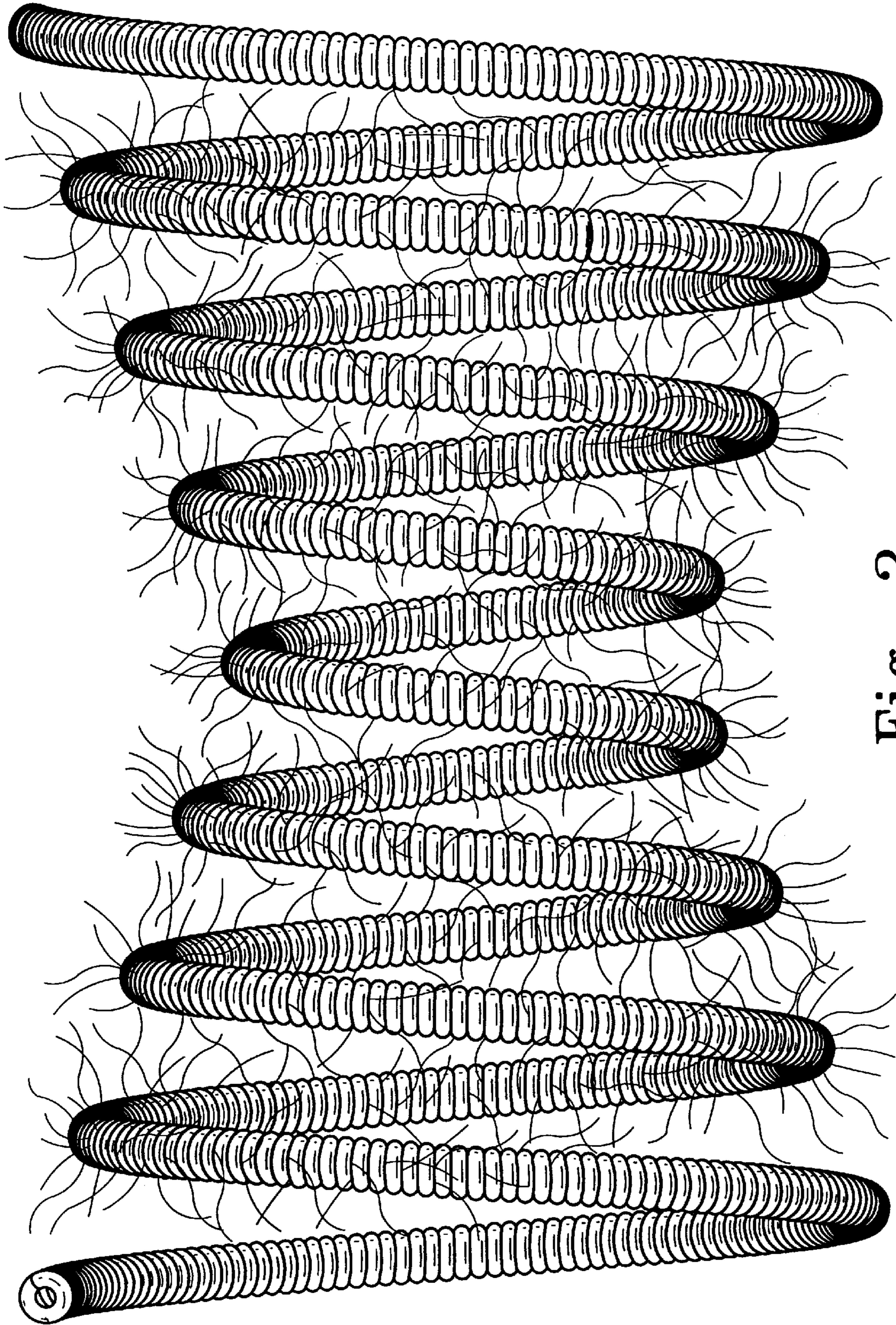


Fig. 2

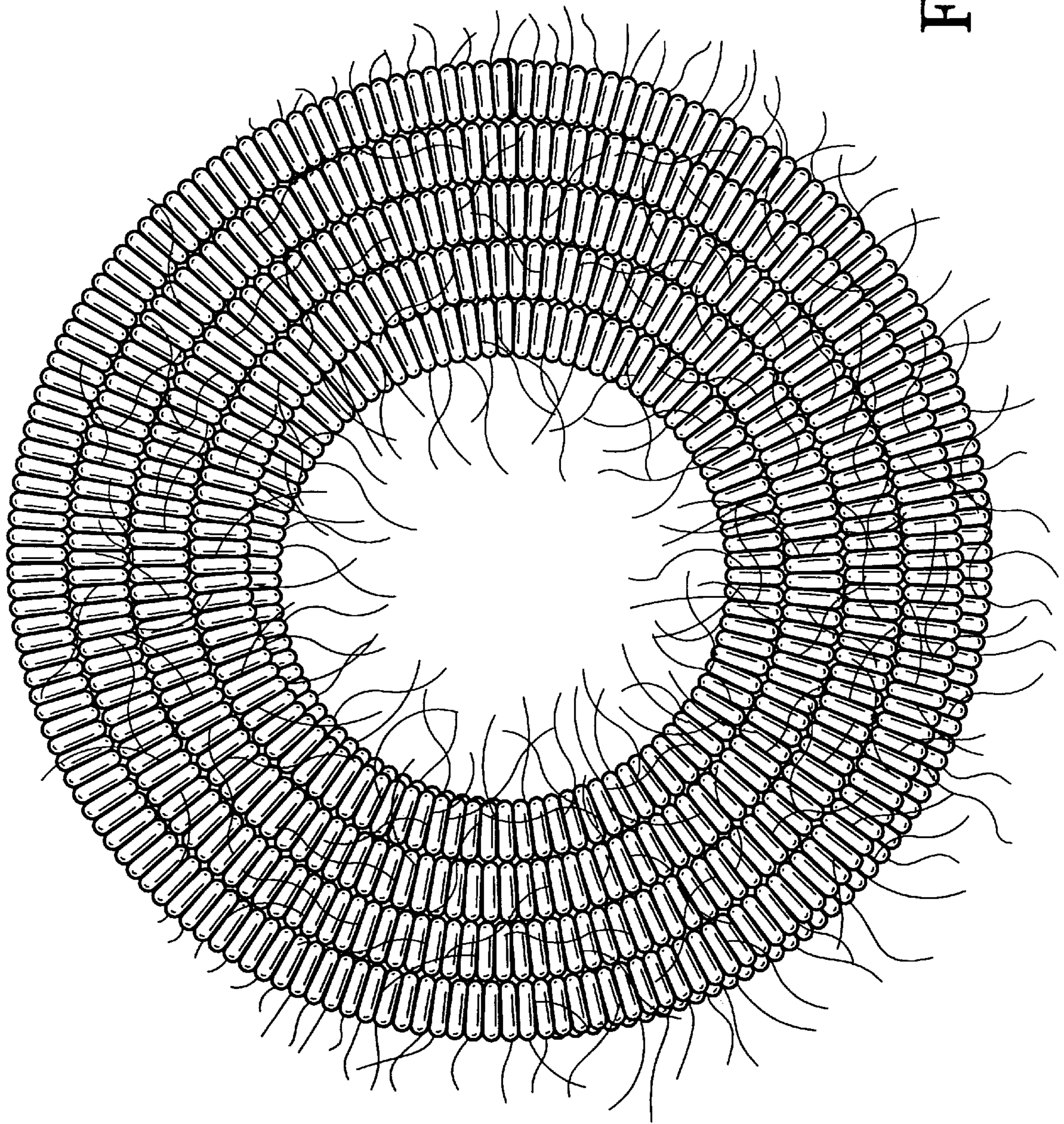


Fig. 3

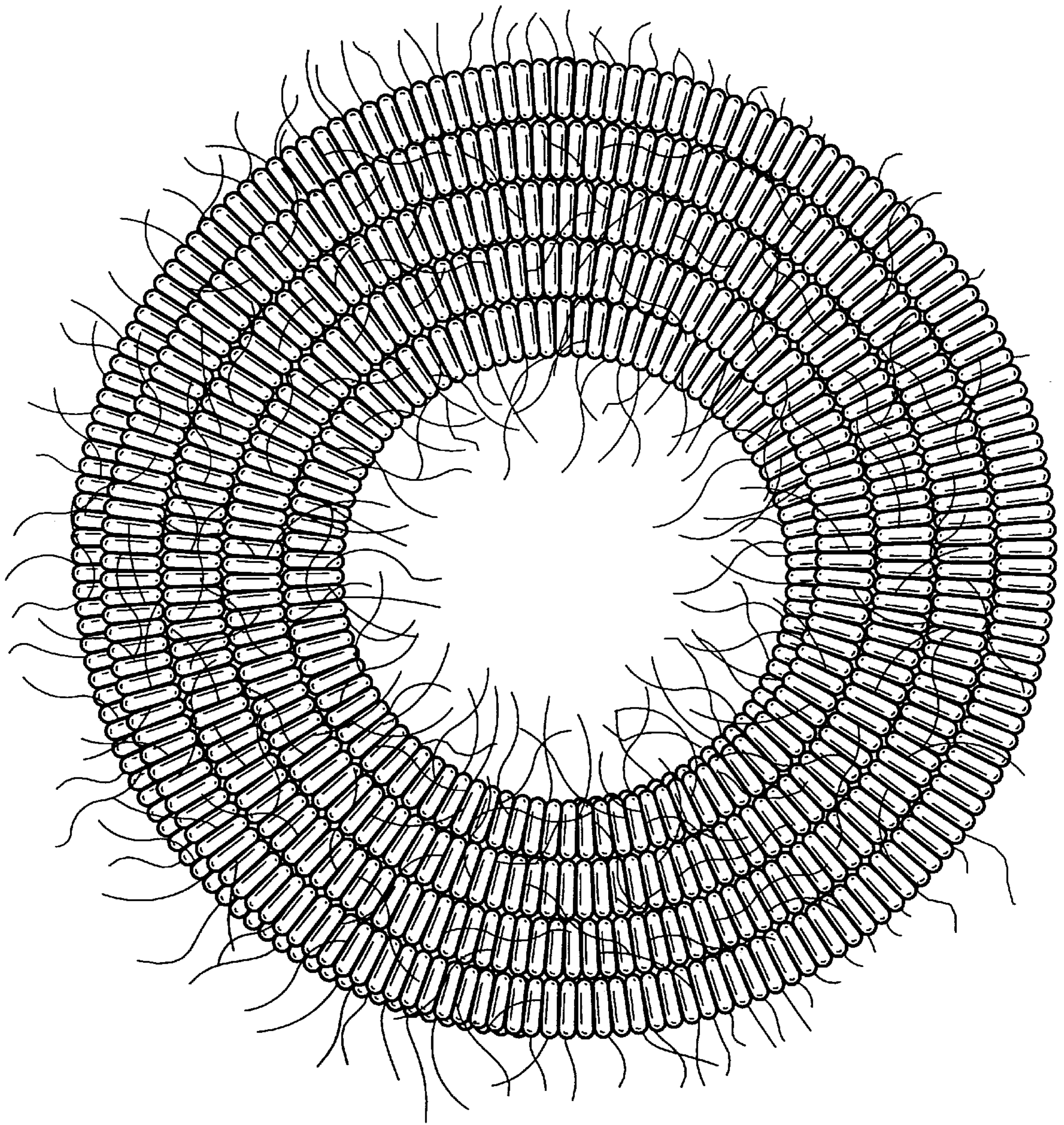


Fig. 4

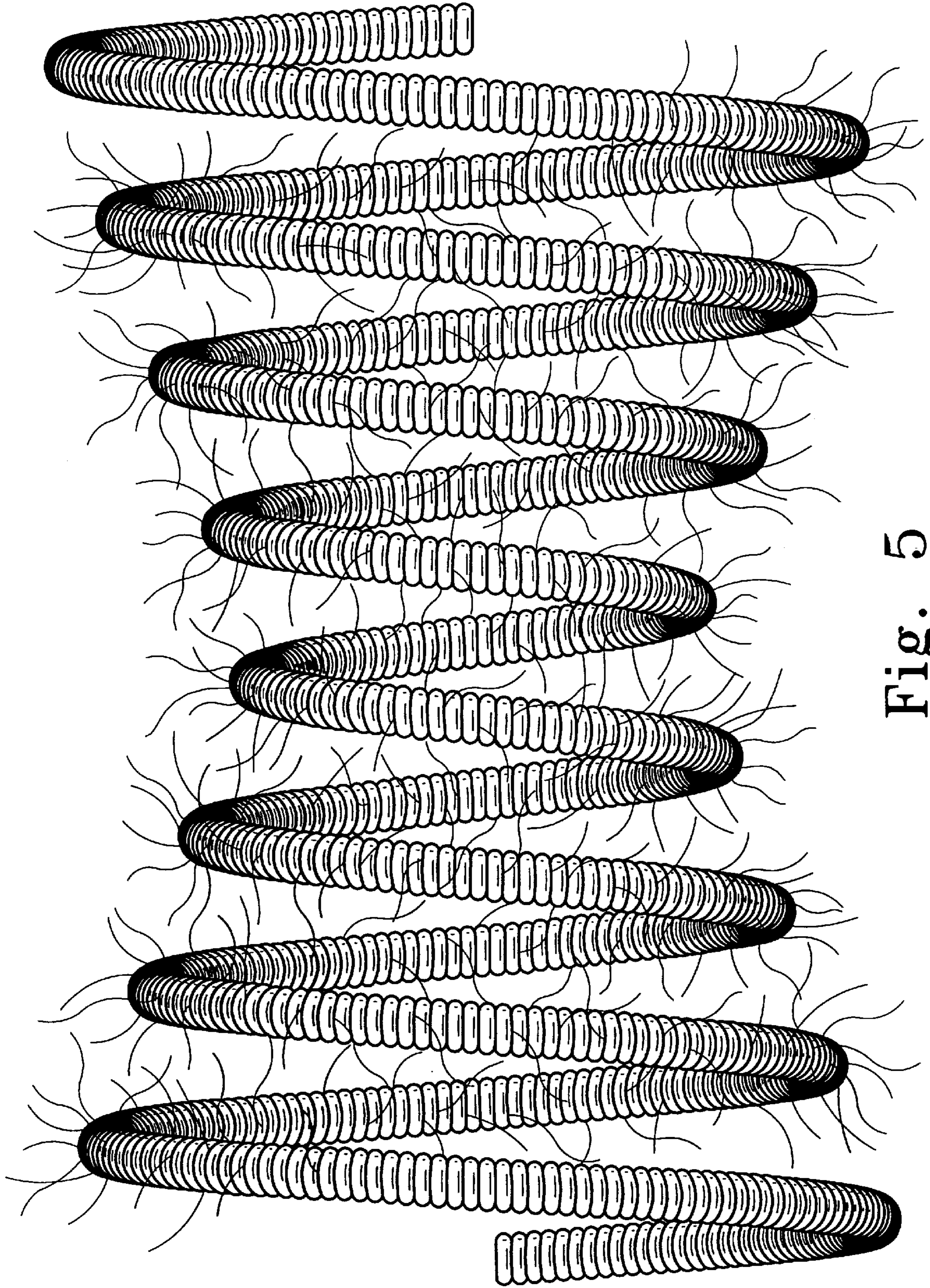


Fig. 5

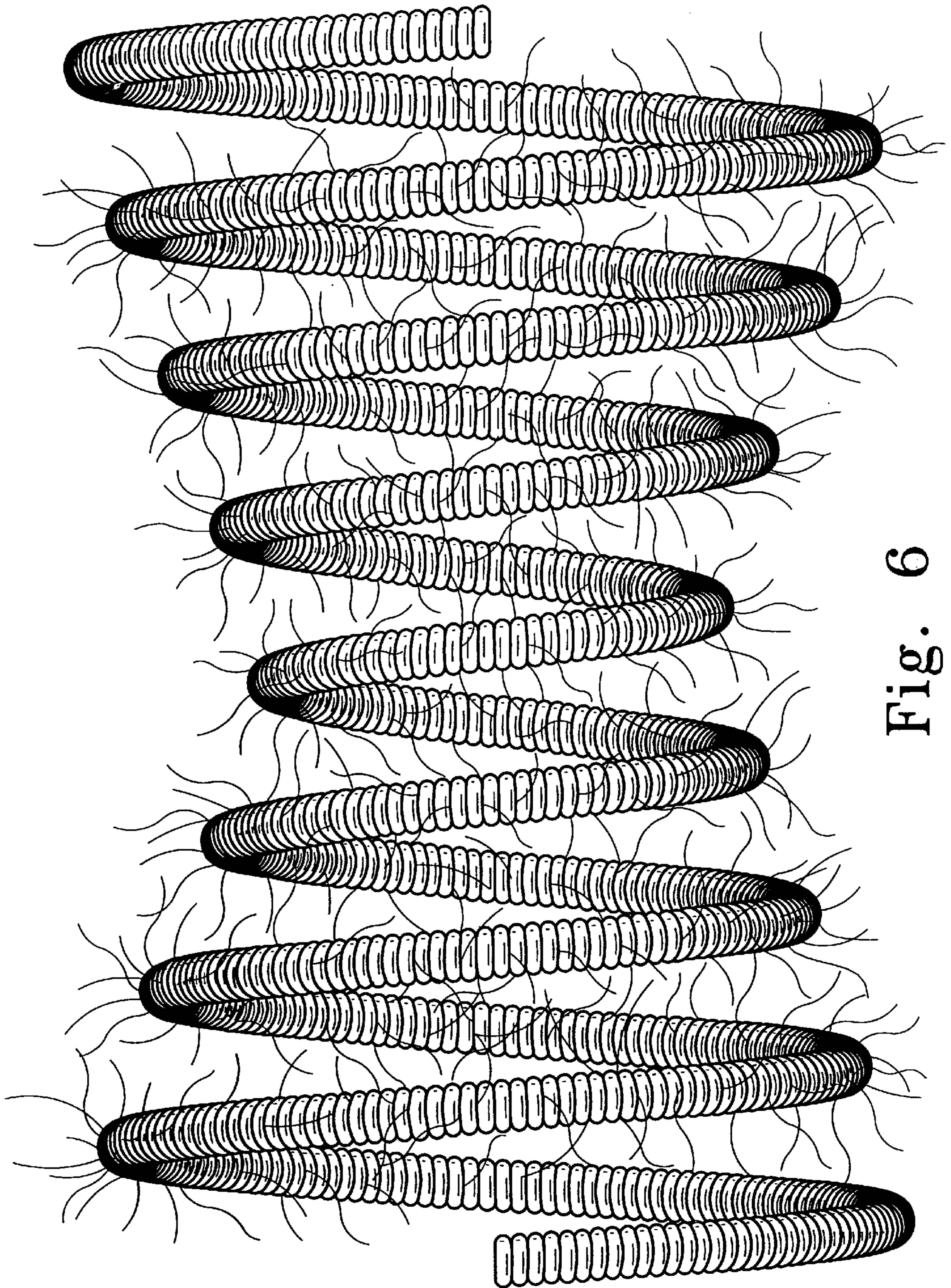


Fig. 6

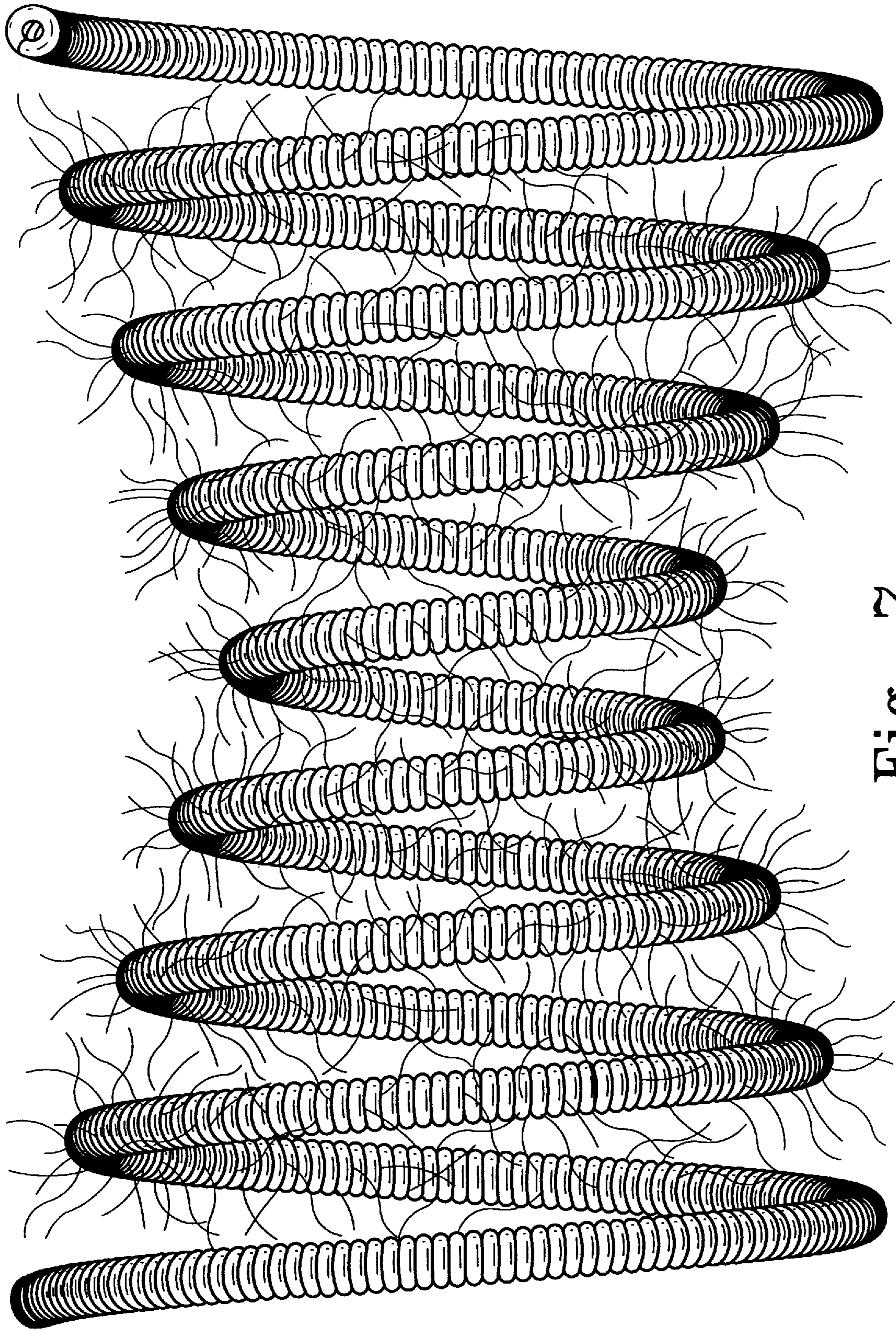


Fig. 7



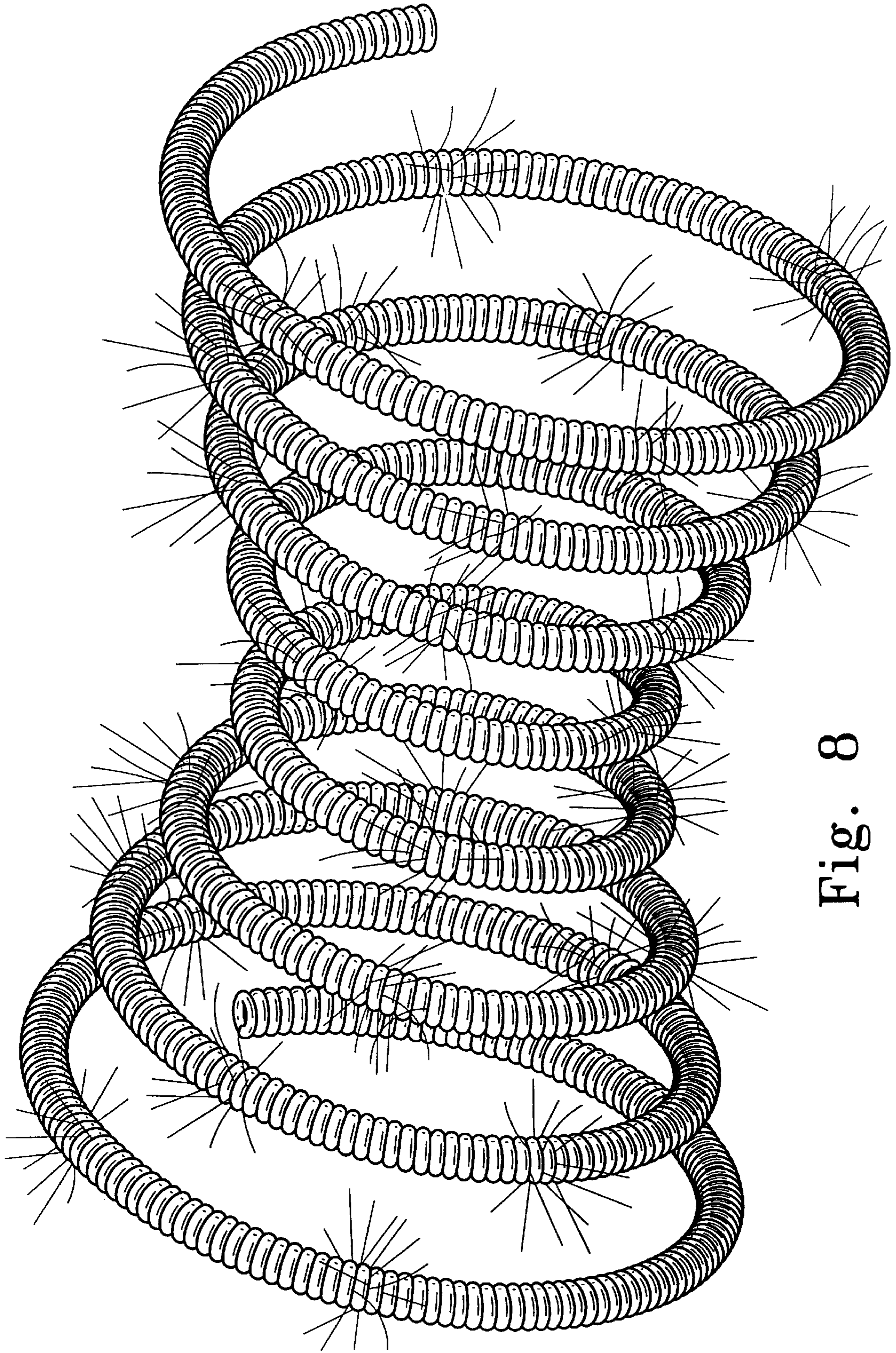


Fig. 8

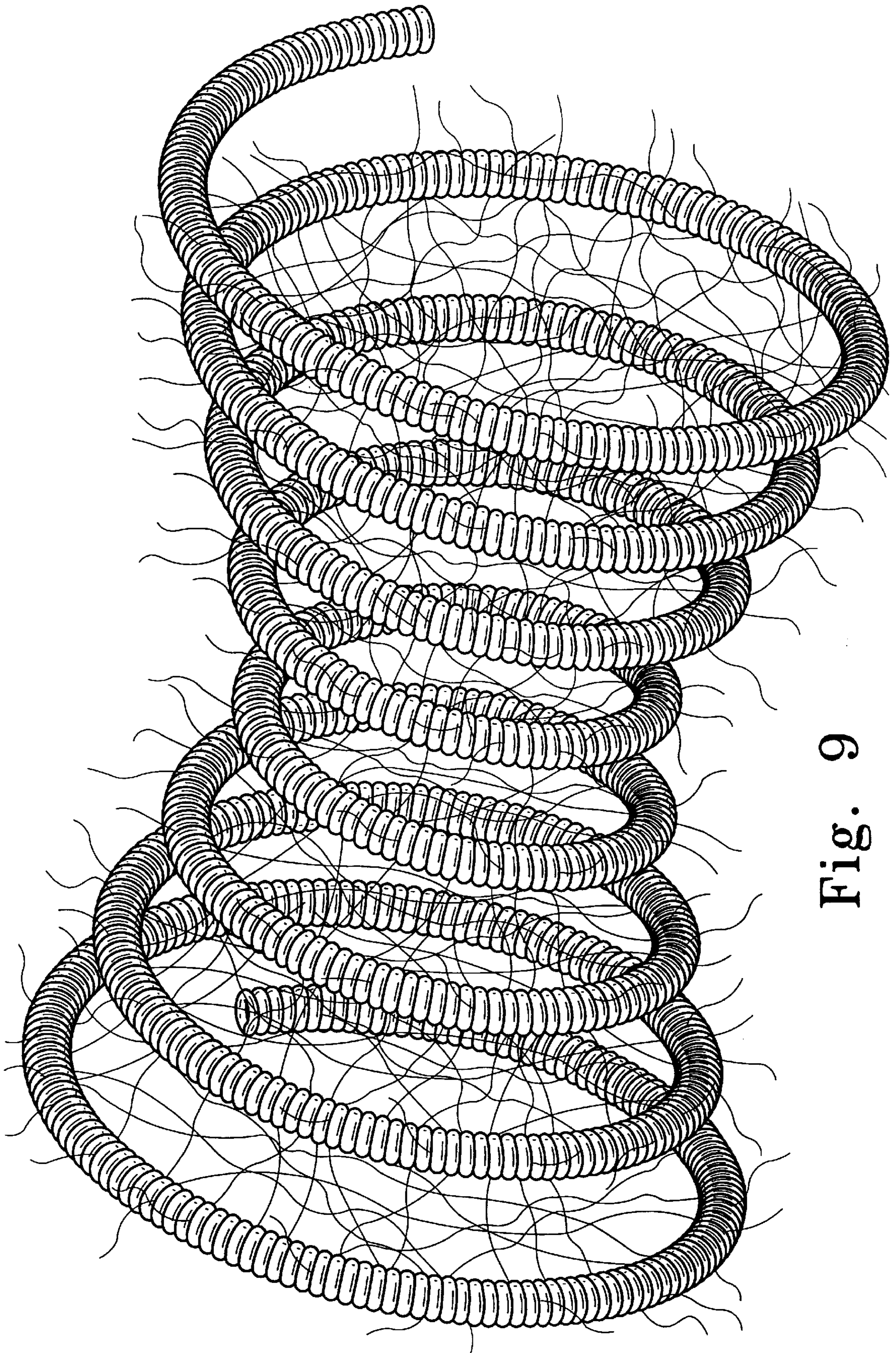


Fig. 9