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Knoche et al.

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- (54) **LIGHT RUNNING SHOE**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

| | | | |
|-----------------|---------|----------------|---------|
| 5,237,758 A * | 8/1993 | Zachman | 36/32 R |
| 5,396,675 A | 3/1995 | Vincent et al. | 12/142 |
| 5,477,577 A | 12/1995 | Hadley | 12/142 |
| 5,628,127 A | 5/1997 | Nötzold | 36/14 |
| 5,732,480 A | 3/1998 | Nötzold | 36/14 |
| 6,032,388 A | 3/2000 | Fram | 36/129 |
| 2001/0045028 A1 | 11/2001 | Crane et al. | 36/44 |

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(30) **Foreign Application Priority Data**

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(51) **Int. Cl.**⁷ **A43B 5/00**

(52) **U.S. Cl.** **36/129; 36/59 C**

(58) **Field of Search** 36/59 R, 59 C,
36/129

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | |
|---------------|---------|-------------------|---------|
| 12,219 A * | 1/1855 | Foster | 228/50 |
| 692,397 A * | 2/1902 | Wilkinson | 428/223 |
| 1,124,062 A * | 1/1915 | Robinson | 36/71.5 |
| 1,383,793 A * | 7/1921 | Eckel | 442/250 |
| 2,333,303 A * | 11/1943 | Enos | 36/25 R |
| 2,349,975 A * | 5/1944 | Mackenzie | 428/94 |
| 2,364,134 A * | 12/1944 | Dow et al. | 428/94 |
| 2,400,487 A * | 5/1946 | Clark | 428/89 |
| 2,557,946 A * | 6/1951 | Crooker | 36/32 R |
| 3,190,016 A | 6/1965 | Hansjosten | 36/2.5 |
| 3,555,697 A * | 1/1971 | Dassler | 36/129 |
| 4,245,406 A | 1/1981 | Landay et al. | 36/14 |
| 4,297,796 A | 11/1981 | Stürtz et al. | 36/28 |
| 4,407,034 A | 10/1983 | Ralphs | 12/142 |
| 4,876,053 A | 10/1989 | Norton et al. | 264/255 |
| 4,899,465 A | 2/1990 | Bleimhofer et al. | 36/14 |
| 5,193,240 A | 3/1993 | Salpietro | 12/146 |

FOREIGN PATENT DOCUMENTS

| | | | | |
|----|-------------|---------|-------|------------|
| DE | 3021129 C2 | 2/1981 | ..... | A43B/5/00 |
| EP | 0111084 | 6/1984 | ..... | A43B/5/00 |
| EP | 0161136 | 3/1987 | ..... | B29C/45/14 |
| EP | 0387268 | 5/1989 | ..... | A43B/7/14 |
| EP | 0353430 | 2/1990 | ..... | A43B/5/08 |
| EP | 0389752 | 10/1990 | ..... | A43B/5/02 |
| EP | 0320993 | 11/1990 | ..... | A43B/21/26 |
| EP | 0395538 | 6/1991 | ..... | A43B/3/18 |
| EP | 0458174 A1 | 11/1991 | ..... | A43B/13/12 |
| WO | WO 89/04125 | 5/1989 | ..... | A43B/7/14 |
| WO | WO 89/05593 | 6/1989 | ..... | A43B/21/26 |
| WO | WO 94/13164 | 6/1994 | ..... | A43B/13/00 |
| WO | WO 98/39984 | 9/1998 | ..... | A43B/13/18 |

OTHER PUBLICATIONS

Photograph of ASIC® show with a thermoplastic urethane grid affixed with glue to a conventional outsole in a rear foot portion of the shoe.

* cited by examiner

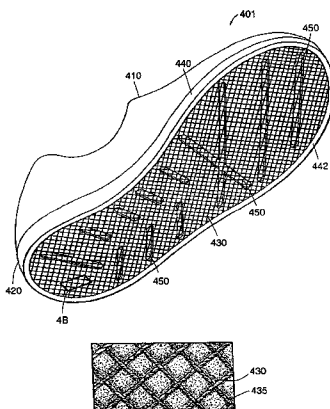
Primary Examiner—M. D. Patterson

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(57) **ABSTRACT**

The present invention relates to a sole for an article of footwear and the method of manufacture. The sole includes a mesh layer at least partially embedded in a sole layer. The method for manufacturing the sole includes the steps of providing a mold, inserting a mesh into the mold, and forming a sole layer in the mold, the sole layer having a mesh layer at least partially embedded in the sole layer. The invention also relates to an article of footwear that includes this sole, and the method of manufacture thereof.

28 Claims, 7 Drawing Sheets



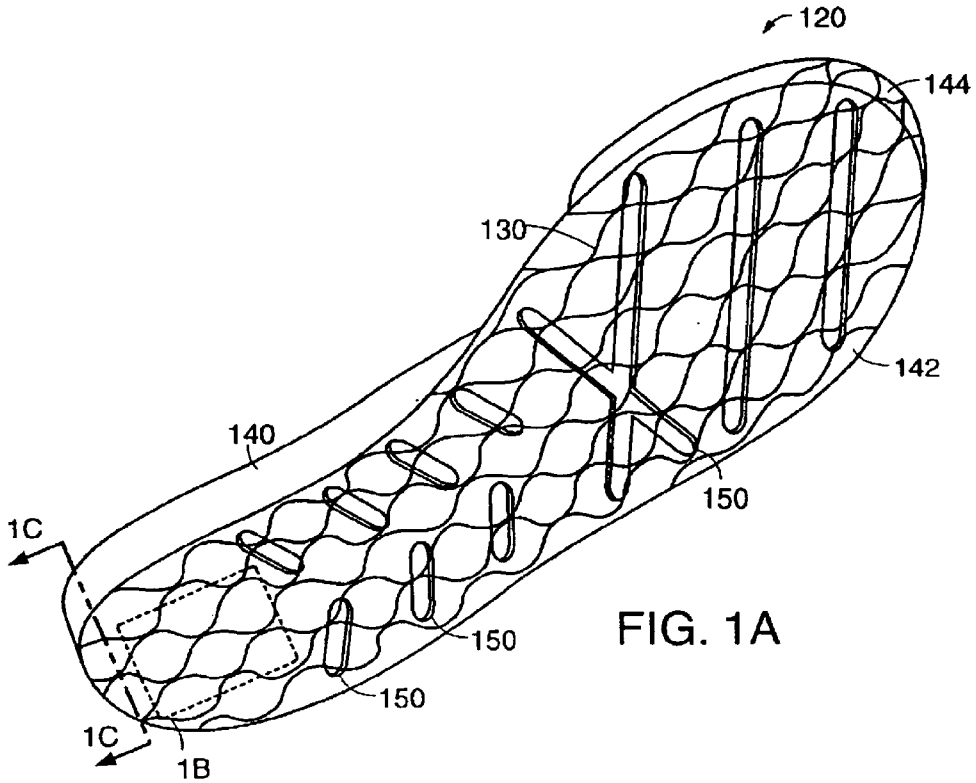


FIG. 1A

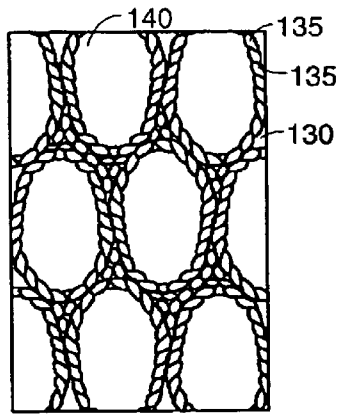


FIG. 1B

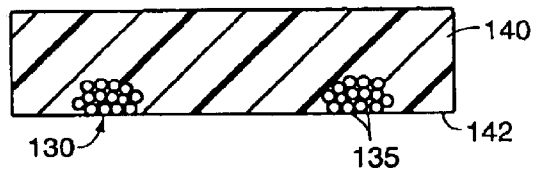


FIG. 1C

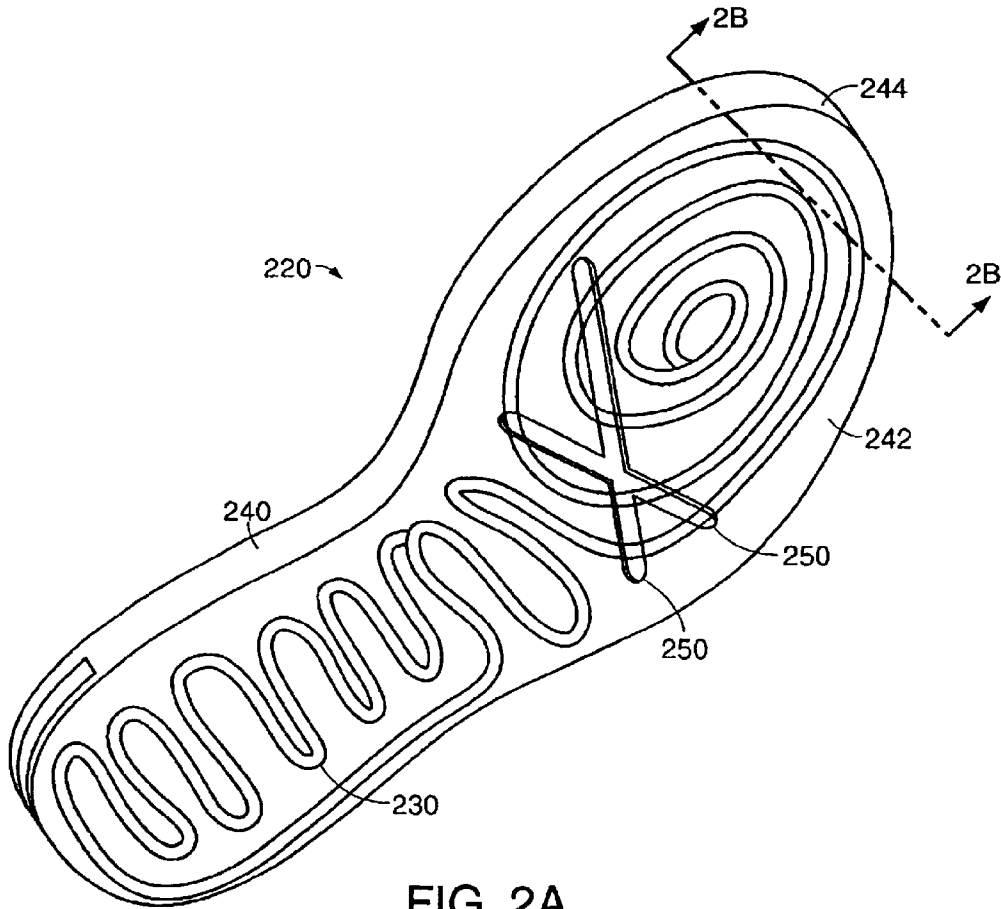


FIG. 2A

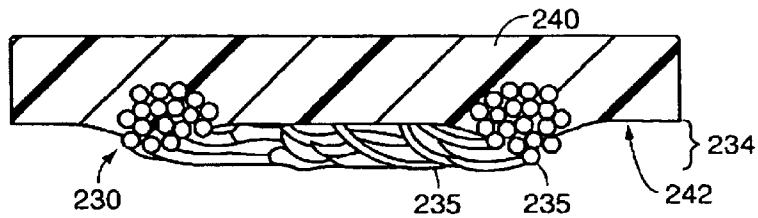


FIG. 2B

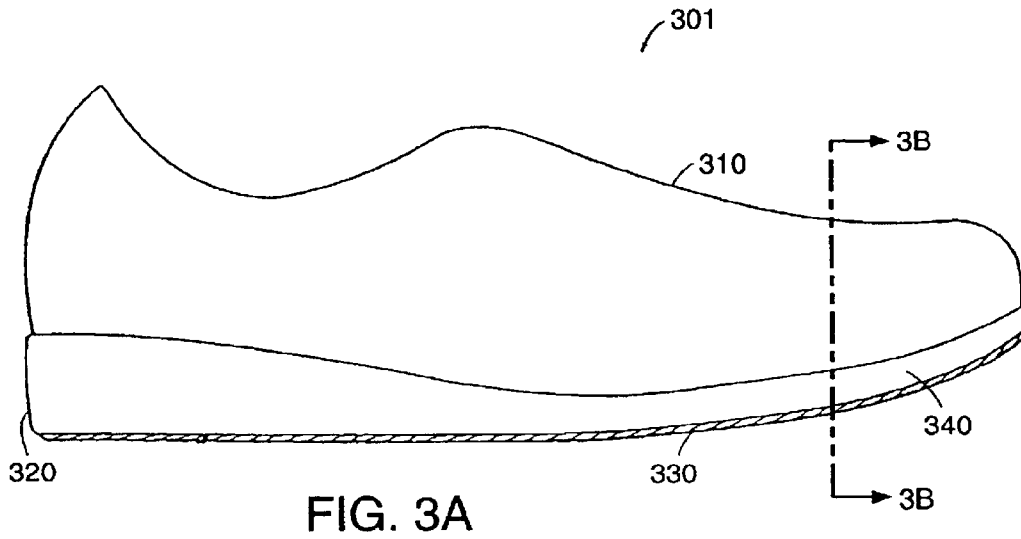


FIG. 3A

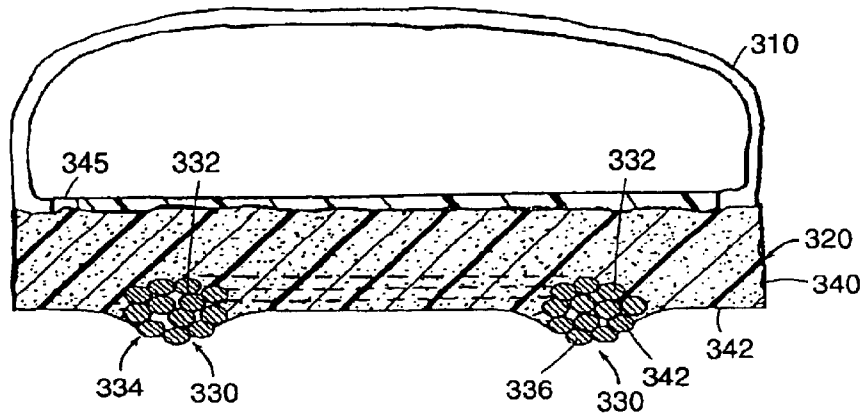


FIG. 3B

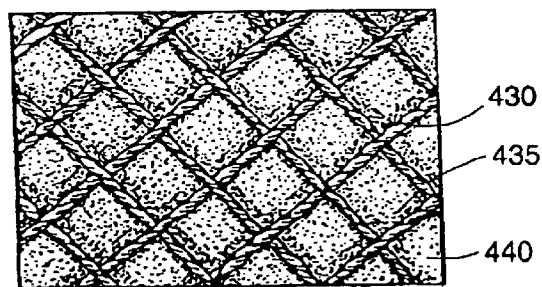
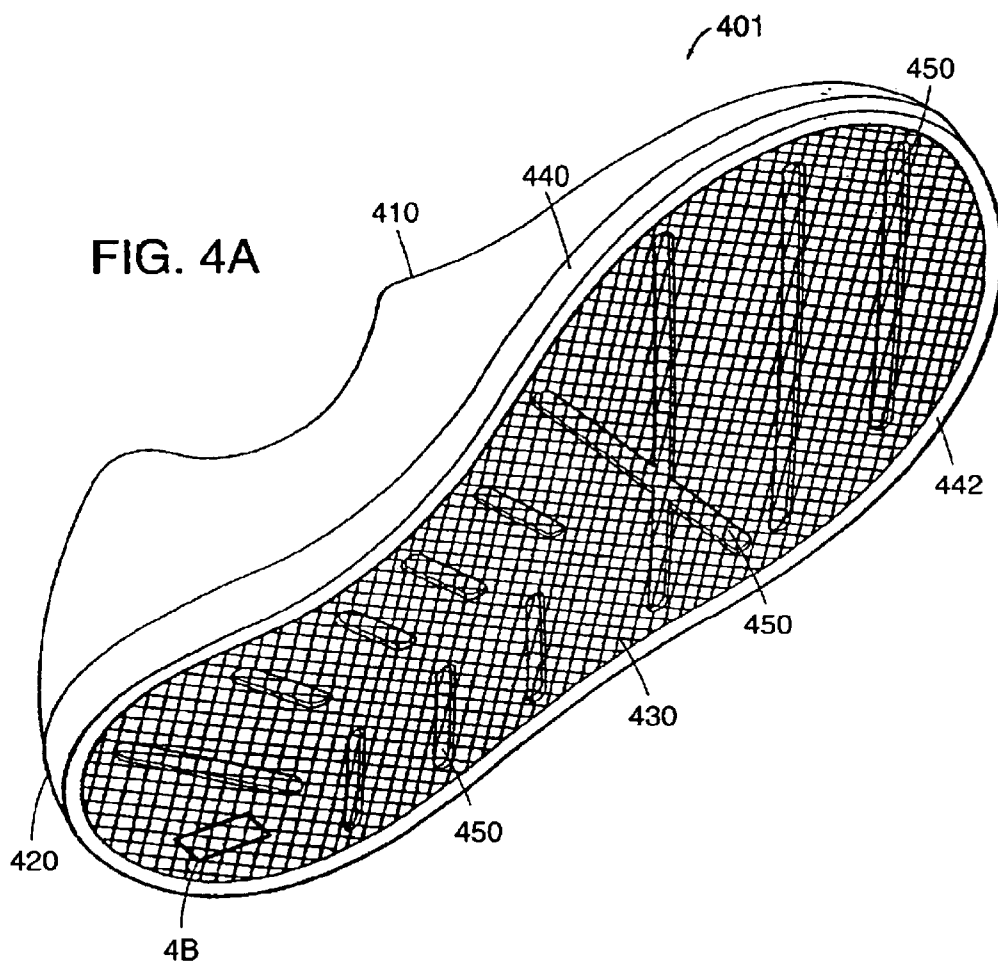


FIG. 4B

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