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Laycock et al.

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(54) **METHOD TO MAKE CIRCULAR-KNIT ELASTIC FABRIC COMPRISING SPANDEX AND HARD YARNS**

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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.

This patent is subject to a terminal disclaimer.

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(65) **Prior Publication Data**

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Related U.S. Application Data

(63) Continuation of application No. PCT/US2004/017364, filed on Jun. 1, 2004, which is a continuation of application No. 10/454,746, filed on Jun. 2, 2003, now Pat. No. 6,776,014.

(51) **Int. Cl.**
D04B 1/18 (2006.01)

(52) **U.S. Cl.** **66/198; 66/8**

(58) **Field of Classification Search** **66/8, 66/196-202; 442/304, 306, 313**
See application file for complete search history.

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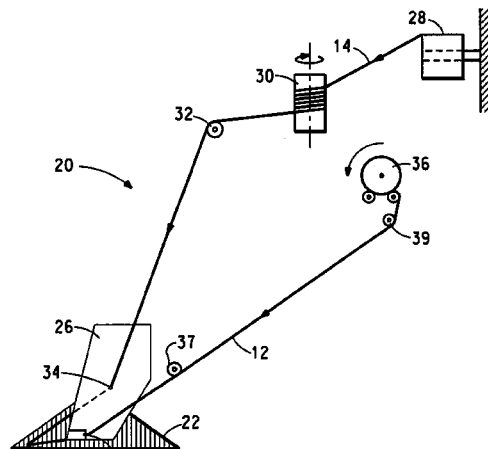
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(57) **ABSTRACT**

Circular-knit, elastic, single-knit jersey fabric, of spun and/or continuous filament hard yarns with bare spandex plated in every course, has a cover factor in the range of 1.3 to 1.9, a basis weight from 140 to 240 g/m², an elongation of 60% or more and low shrinkage. The circular knit, single-knit jersey fabric is produced by maintaining the draft of the spandex at or below 2× (100% elongation) and maintaining the finishing and drying temperature(s) below the spandex heat set temperature. The knit fabric meets the end-use specifications without heat setting.

32 Claims, 4 Drawing Sheets



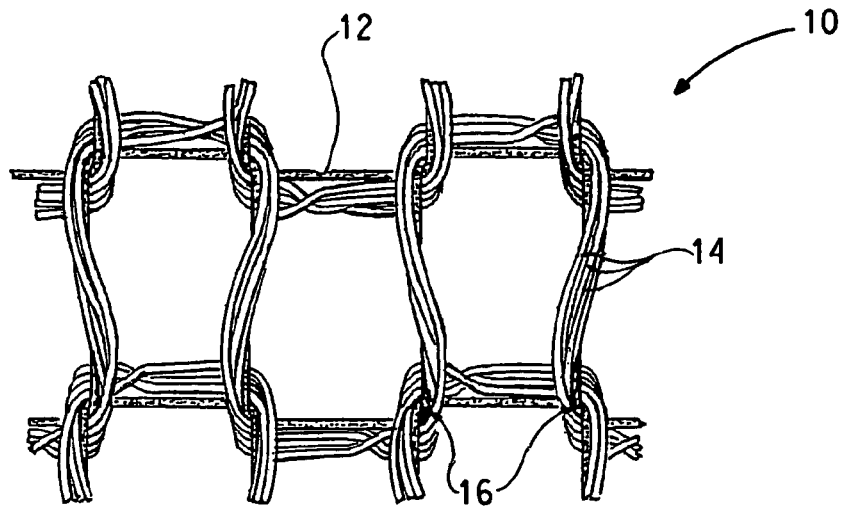


FIG. 1

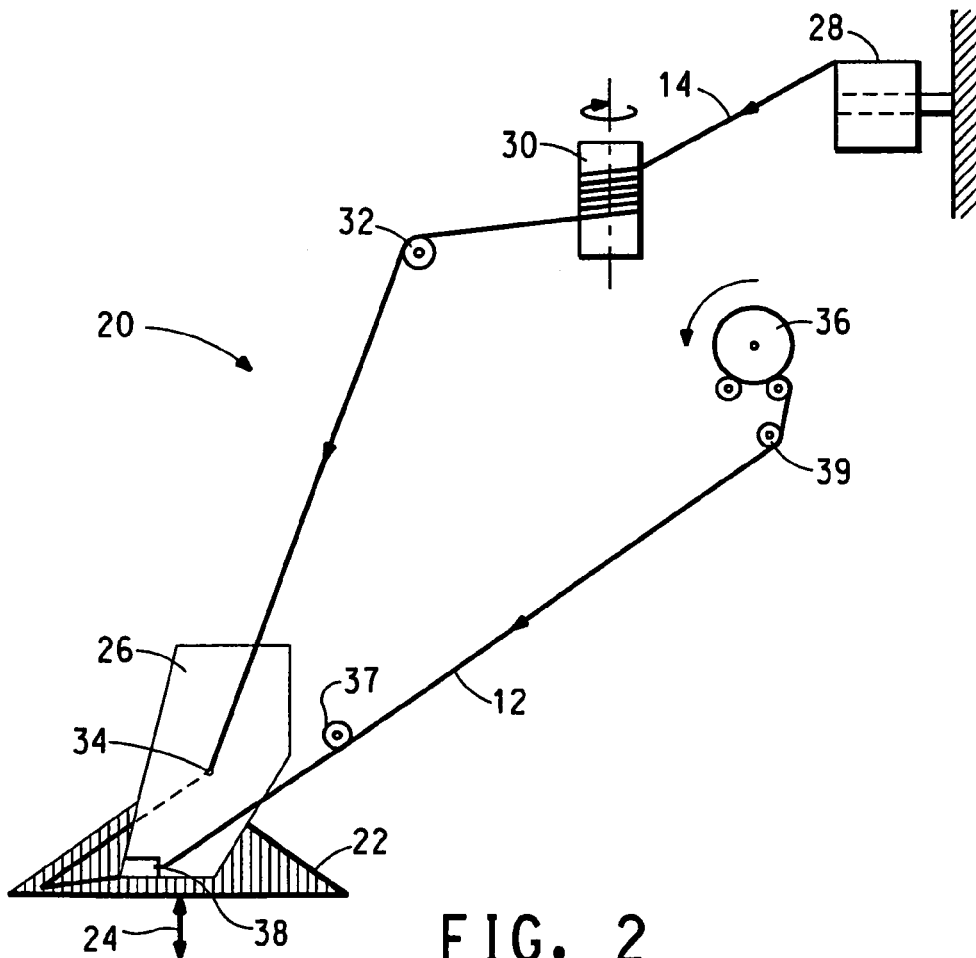


FIG. 2

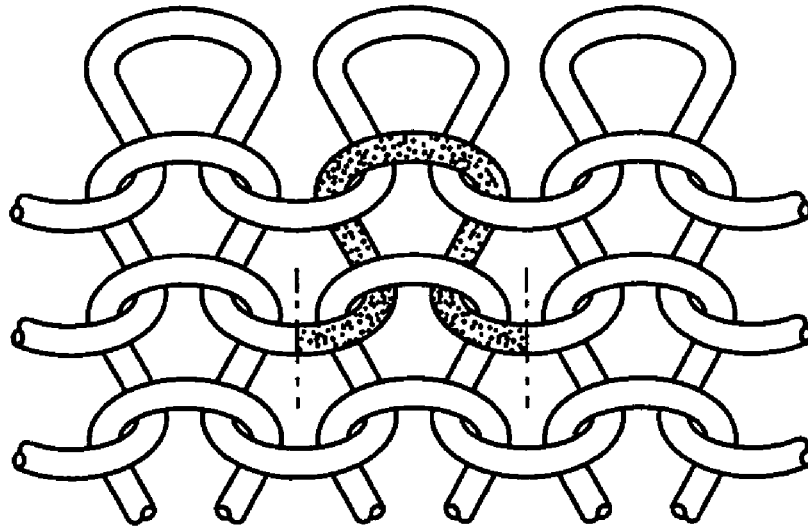


FIG. 3

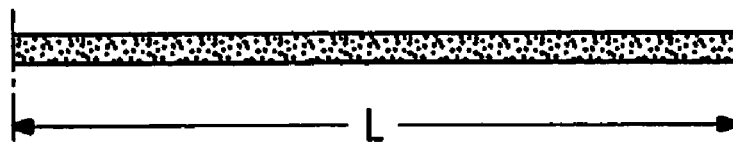


FIG. 3A

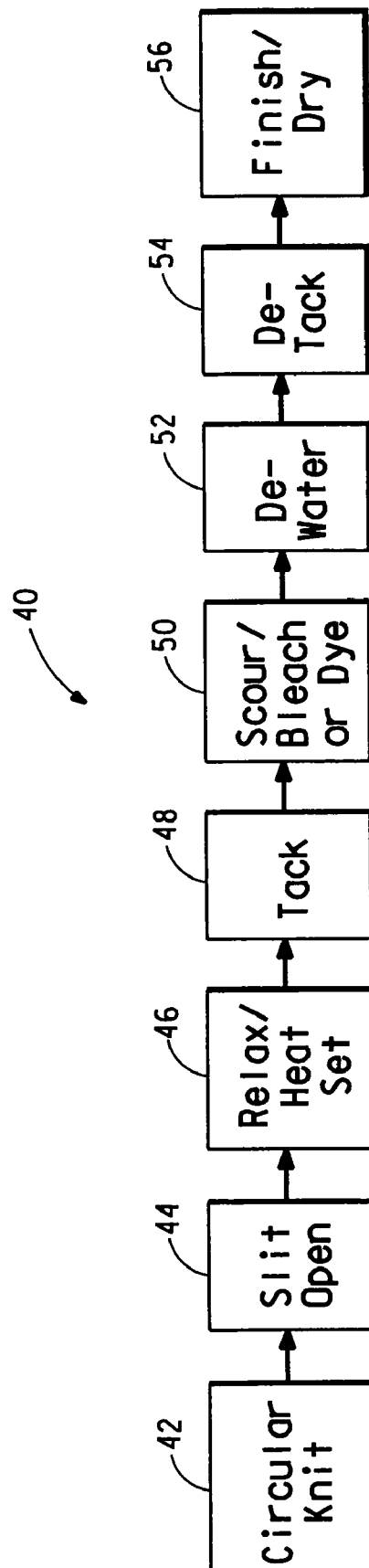


FIG. 4
(Prior Art)

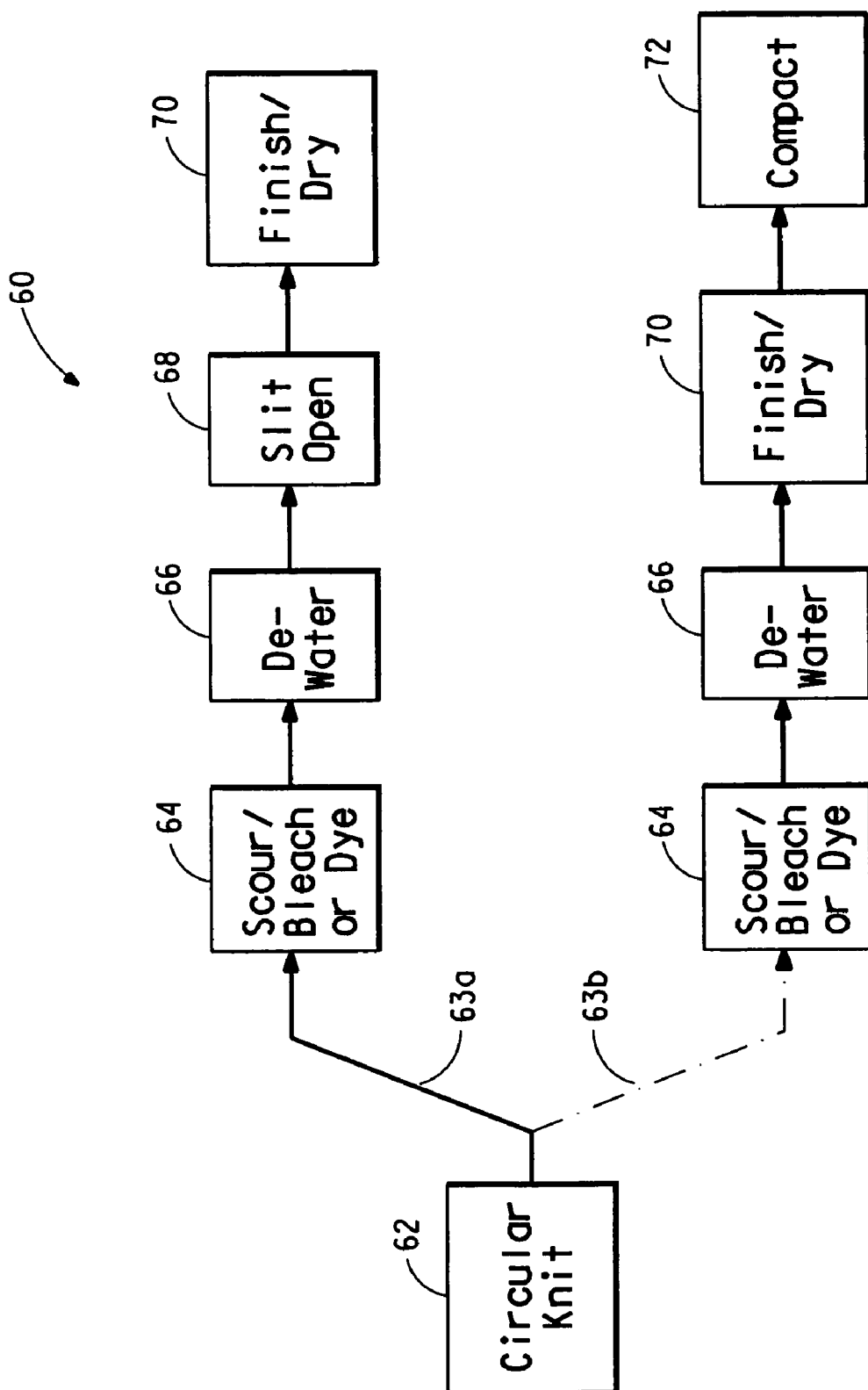


FIG. 5

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