

IP-tech



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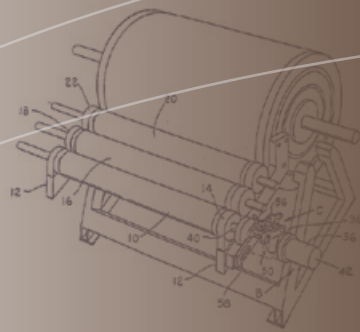
[54] **FEED ROLL SENSOR FOR A TEXTILE CARDING MACHINE**
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 [52] U.S. Cl. 19/105; 19/240
 [56] Field of Search 19/105; 106 R. 240

References Cited
U.S. PATENT DOCUMENTS
 3,431,267 11/1968 Green et al. 19/105
 4,458,548 3/1984 Gruber 19/105
 4,646,387 3/1987 Oswald et al. 19/105

Abstract
 Apparatus for sensing the amount of fibrous mass (F) passing through a nip (26) between a feed roll (10) and a carding machine frame (12). The feed roll (10) is affixed to the frame (12) of the carding machine for feeding fibers through a nip (26) between the feed roll (10) and a feed plate (24). A rotational drive (14) is affixed at a free end of a feed roll shaft (18) in a fixed manner relative to the carding machine frame. Reaction force sensors (C) is mechanically coupled between rotational drive (14) and carding machine frame (12). Drive means (C) senses the reaction forces on the rotational drive caused by the torque of feed roll (10) during feeding of fibrous mass (F) through nip (26). Sensor (C) includes a displaceable torque arm (36) and a torque member (34). Sensor (36) senses the displacement of torque arm (36) which is affixed to rotational drive (14).

3 Claims, 3 Drawing Sheets



intellectual property in the textile industry

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