

Title (en)  
Vacuum spinning.

Title (de)  
Vakuumspinnen.

Title (fr)  
Filature sous vide.

Publication  
**EP 0184277 A2 19860611 (EN)**

Application  
**EP 85302322 A 19850402**

Priority  
• US 67748784 A 19841203  
• US 68051084 A 19841211

Abstract (en)  
Vacuum spun yarn may be produced that have strength and properties approaching that of ring spun yarn, and at speeds greatly in excess of production speeds for ring spun yarn. An elongated hollow shaft (15, 150) has a through-extending passageway (153, 154) from a first end to a second end thereof, with a portion of the shaft adjacent the first end perforated (16, 155-157). The perforation slant in the direction of the second end, and a spherical vacuum reservoir (162) is formed in the shaft. A diffuser in the form of a collar (164) having elongated slots (169, 170) corresponding to the perforations surrounds the shaft, surrounds the shaft. The shaft is rotated about an axis at a constant high speed so that free ends of fibers passing through the shaft will draw toward the shaft perforations and be caused to rotate with the shaft as the fibers move linearly along the axis of rotation. A core filament yarn (c), such as a full stretched textured yarn, may be fed into the shaft with the nipped sliver or roving fibers. Yarns may be produced having a spun-like appearance, a loop or Boucle effect, or a yarn having a core with real twists with fibers wrapped about the core to provide surface effects.

IPC 1-7  
**D02G 3/38; D02G 1/16**

IPC 8 full level  
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**EP 0184277 A2 19860611; EP 0184277 A3 19870819; EP 0184277 B1 19930623**; AU 4031185 A 19860612; AU 571952 B2 19880428; BR 8501514 A 19861014; CA 1291379 C 19911029; CN 1027384 C 19950111; CN 1103681 A 19950614; CN 85101203 A 19860610; CS 238685 A3 19920415; CZ 278684 B6 19940518; DE 3587417 D1 19930729; DE 3587417 T2 19940203

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