

Title (en)  
CIRCULAR KNITTING MACHINE

Publication  
**EP 0436313 A3 19920108 (EN)**

Application  
**EP 90313333 A 19901207**

Priority  
JP 32225789 A 19891211

Abstract (en)  
[origin: EP0436313A2] The circular knitting machine includes a rotatable support shaft (20) supported at its upper end on a frame support member (27). The support shaft (20) extends downward to a position adjacent the circular opening in the upper end of the needle cylinder (6). It has diametrically stepped small and large lower end portions. The needle dial (17) is supported adjacent the opening in the upper end of the needle cylinder (6) and has a shaft engaging upper surface and upper dial cam holder engaging surface lying substantially flush with each other. A needle dial orifice is dimensioned substantially equal to the small stepped portion of the support shaft (20) for receiving this stepped portion therethrough to aid in positioning of the needle dial thereat. A vertically extending support sleeve (19b,27a) surrounds the support shaft (20) and is supported at the upper end on the frame support member (27) for telescopic vertical movement relative to the support shaft (20). The lower end of the support sleeve (19b) is fixed to the dial (17) for supporting same. A dial control, including gears (26,29), is provided for lifting and lowering the support sleeve (19b) along the support shaft (20) to lift the dial (17) a sufficient distance to permit removal and replacement of the needle cylinder (6). <IMAGE>

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**D04B 9/06**

IPC 8 full level  
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Citation (search report)  
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