

Title (en)  
Unitary spindle driving apparatus for spinning machine

Title (de)  
Einheitliche Spindelantriebsvorrichtung für Spinnmaschinen

Title (fr)  
Dispositif unitaire d'entraînement de broches d'un métier à filer

Publication  
**EP 1002891 A2 20000524 (EN)**

Application  
**EP 99116740 A 19990827**

Priority  
JP 33063798 A 19981120

Abstract (en)  
A unitary spindle driving apparatus for a spinning machine of a structure which facilitates mounting of the unitary spindle driving apparatus for a spinning machine on a spinning machine frame as in the case of a conventional spindle apparatus while suppressing problems such as breakage of wire interconnecting an electric drive motor and a control unit. The unitary spindle driving apparatus 1 includes a bolster (2), a spindle (3) supported rotatably on the bolster (2), an electric motor (4) for driving the spindle (3), a control unit (5) for controlling the driving motor (4) and a rotation speed monitoring unit (6) for monitoring the rotation of the spindle (3). The motor (4), the control unit (5) and the rotation speed monitoring unit (6) are disposed within a single housing (7). A rotor (13) of the motor (4) is secured to the spindle (3) so as to rotate together therewith. A stator (14) of the motor (4) is fixedly mounted on the housing (7) at a position opposite to the rotor (13). Disposed at a rear side within the housing (7) is a driver circuit substrate (15) on which a driving circuit module is packaged, while disposed within the housing (7) at a front side thereof is a CPU substrate (16) on which a CPU module is packaged. The control unit (5) is constituted by the driver circuit substrate (15) and the CPU substrate (16). <IMAGE>

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