

Title (en)  
Multi-needle automatic sewing machine.

Title (de)  
Automatische Mehrnadelnähmaschine.

Title (fr)  
Machine à coudre automatique à aiguilles multiples.

Publication  
**EP 0081289 A1 19830615 (EN)**

Application  
**EP 82305575 A 19821020**

Priority  
• US 31541581 A 19811027  
• US 36449582 A 19820401

Abstract (en)  
A sewing machine has two needles (44, 46) each supported in a needle holder (48, 50) which is horizontally displacable, to present one needle (44 or 46) to an active workstation in a prethreaded manner and simultaneously shift the other needle (44 or 46), which has a different thread therein, into an adjacent inactive position. As the needles (44,46) are being shifted, the needle (44 or 46) moving to inactive status has its thread (160 or 170) clamped against the needle holder (48 or 50) by a wheel (68 or 74), to secure the thread (160 or 170) from being pulled therefrom or straying. A vacuum tube (78) arranged at each respective inactive position or station sucks the tail of the thread (160 or 170) therein. Alternatively, a thread wiping finger (202 or 204) may clink the thread end against an associated plate (222 or 224) and wipe it out of the way. Two thread guides (138), one for each thread (160, 170), are arranged for vertical movement, to pullback on the dangling thread (160 or 170) of the inactive needle to prevent it from whipping during its inactive status.

IPC 1-7  
**D05B 65/06**

IPC 8 full level  
**D05B 53/00** (2006.01); **D05B 55/16** (2006.01); **D05B 65/06** (2006.01)

CPC (source: EP KR)  
**D05B 53/00** (2013.01 - KR); **D05B 55/16** (2013.01 - EP); **D05B 65/06** (2013.01 - EP KR); **D05D 2207/04** (2013.01 - EP)

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Designated contracting state (EPC)  
DE FR GB IT

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**EP 0081289 A1 19830615; EP 0081289 B1 19860709**; DE 3271949 D1 19860814; IL 67057 A0 19830223; IL 67057 A 19850630; KR 840002045 A 19840611; KR 860000398 B1 19860417

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**EP 82305575 A 19821020**; DE 3271949 T 19821020; IL 6705782 A 19821025; KR 820004801 A 19821026