

Title (en)  
SPRING COILING MACHINE WITH IMPROVED FEED ROLL DRIVE MEANS

Publication  
**EP 0037415 B1 19840418 (EN)**

Application  
**EP 80902097 A 19810421**

Priority  
US 8267079 A 19791009

Abstract (en)  
[origin: WO8100974A1] A cyclically operable spring coiling machine has a pair of feed rolls (12, 14 and 16, 18) for intermittently advancing wire to a coiling station (20). A coiling arbor (32) and tool (34) at the coiling station (20) cooperatively form leading end portions of the wire to a coil spring configuration and a cutoff tool (36) severs the coiled leading end portions of the wire to provide individual coil springs. Feed roll drive means includes drive gears (80, 82, 84, 86), a unidirectional clutch, and a feed roll cam (60) with an associated follower (64) and lever (66) driving a reciprocable rack (88) associated with a feed roll drive gear (74). Low inertia reciprocating and oscillating elements are provided for accurate and high speed machine operation.

IPC 1-7  
**B21F 3/02**; **B21F 11/00**; **B21F 23/00**; **B21F 35/00**

IPC 8 full level  
**B21F 3/02** (2006.01); **B21F 3/04** (2006.01); **B21F 11/00** (2006.01); **B21F 23/00** (2006.01); **B21F 35/00** (2006.01)

CPC (source: EP)  
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Cited by  
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AT CH DE GB LI SE

DOCDB simple family (publication)  
**WO 8100974 A1 19810416**; AT E7117 T1 19840515; CA 1144041 A 19830405; DE 3067556 D1 19840524; EP 0037415 A1 19811014; EP 0037415 A4 19820126; EP 0037415 B1 19840418; FR 2467028 A1 19810417; FR 2467028 B1 19851206; IT 8068560 A0 19801009; JP H037456 B2 19910201; JP S56501395 A 19811001; MX 154096 A 19870507

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**US 8001308 W 19801002**; AT 80902097 T 19801002; CA 361973 A 19801006; DE 3067556 T 19801002; EP 80902097 A 19810421; FR 8021494 A 19801008; IT 6856080 A 19801009; JP 50250880 A 19801002; MX 18422880 A 19801007