

**CPC****COOPERATIVE PATENT CLASSIFICATION****F16P****SAFETY DEVICES IN GENERAL; {SAFETY DEVICES FOR PRESSES }****NOTE**

Attention is drawn to the following places:

[A01D 75/18](#) Harvesting machines  
[A01F 21/00](#) Threshing machines or baling presses  
[B02C 23/04](#) Crushing or disintegrating machines  
[B21B 33/00](#) Rolling of metal  
[B21D 55/00](#) Working sheet metal or tubes, rods or profiles without essentially removing material  
[B23B 25/04](#) Turning-machines  
[B23O 11/00](#) Machine tools  
[B24B 55/00](#) Grinding or polishing machines  
[B25J 19/06](#) Manipulators  
[B26D 7/22](#) Cutting machines  
[B27G 19/00](#) Wood saws  
[B65B 57/00](#) Packaging machines or apparatus  
[B65G 43/00](#) Conveyers  
[B65H 26/00](#) Web-advancing mechanisms  
[B65H 63/00](#) Handling or winding of thin or filamentary material  
[D01G 31/00](#) Treatment of fibres  
[D01H 13/14](#) Spinning or twisting  
[D05B 83/00](#) Sewing machines  
[F21V 25/00](#) Lighting devices.

**Guidance heading:** Devices protecting or preventing injuries to people

- F16P 1/00**      **Safety devices independent of the control and operation of any machine** (protective devices for the eyes or ears, worn on the body or carried in the hand, [A61F 9/00](#), [A61F 11/00](#))
- F16P 1/005**      . {Guards for rolls in calandering or other roll machines, e.g. nip guards, finger guards }
- F16P 1/02**      . Fixed screens or hoods
- F16P 1/04**      . Screens or hoods rotating with rotary shafts
- F16P 1/06**      . specially designed for welding
- F16P 3/00**      **Safety devices acting in conjunction with the control or operation of a machine; Control arrangements requiring the simultaneous use of two or more parts of the body** ([F16P 5/00](#) takes precedence)
- F16P 3/001**      . {Safety devices for guarding the human operator of punch presses or like machine tools performing an opening and closing travel }
- F16P 3/003**      .. {by application of a specific control arrangement, e.g. specific switching systems or two-hand control }
- F16P 3/005**      .. {having a movable screen or a sensor influencing the switching system }

- F16P 3/006 . . {having a screen moving with the machine and moving the operator out of danger, or restraining the operator, without influencing the switching system }
- F16P 3/008 . {Devices for directly stopping or interrupting the drive or gear in case of danger to the machine, e.g. devices with clutches }
- F16P 3/02 . Screens or other safety members moving in synchronism with members which move to and fro
- F16P 3/04 . . for machines with parts which approach one another during operation, e.g. for stamping presses
- F16P 3/06 . . . in which body parts of the operator are removed from the danger zone on approach of the machine parts
- F16P 3/08 . in connection with the locking of doors, covers, guards, or like members giving access to moving machine parts
- F16P 3/10 . . in which the operation of locking the door or other member causes the machine to start
- F16P 3/12 . with means, e.g. feelers, which in case of the presence of a body part of a person in or near the danger zone influence the control or operation of the machine ([F16P 3/08 takes precedence](#))
- F16P 3/125 . . {Guards for rolls in calendering or other roll machines, e.g. nip guards, finger guards }
- F16P 3/14 . . the means being photocells or other devices sensitive without mechanical contact

### **WARNING**

Subgroups of [F16P 3/14](#) are not complete pending a reorganisation, see also [F16P 3/14](#)

- F16P 3/141 . . . { using sound propagation, e.g. sonar }
- F16P 3/142 . . . { using image capturing devices }
- F16P 3/144 . . . { using light grids }
- F16P 3/145 . . . { using magnetic technology }
- F16P 3/147 . . . { using electro-magnetic technology, e.g. tags or radar }
- F16P 3/148 . . . { using capacitive technology }
- F16P 3/16 . . with feeling members moved by the machine
- F16P 3/18 . Control arrangements requiring the use of both hands
- F16P 3/20 . . for electric control systems
- F16P 3/22 . . for hydraulic or pneumatic control systems
- F16P 3/24 . . for mechanical controls

### **F16P 5/00      Emergency means for rendering ineffective a coupling conveying reciprocating movement if the motion of the driven part is prematurely resisted**

- F16P 5/005 . {Overload protection by energy absorbing components, e.g. breaker blocks, shear sections }

### **F16P 7/00      Emergency devices preventing damage to a machine or apparatus ([F16P 1/00](#), [F16P 3/00](#), [F16P 5/00](#) take precedence; indicating means, see the appropriate classes)**

F16P 7/02

- by causing the machine to stop on the occurrence of dangerous conditions therein  
(devices in bearings affected by abnormal conditions [F16C](#) )