

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

ENGINEERING IN GENERAL

F16 ENGINEERING ELEMENTS AND UNITS; GENERAL MEASURES FOR PRODUCING AND MAINTAINING EFFECTIVE FUNCTIONING OF MACHINES OR INSTALLATIONS; THERMAL INSULATION IN GENERAL

F16P SAFETY DEVICES IN GENERAL; {SAFETY DEVICES FOR PRESSES}

NOTE

Attention is drawn to the following places:

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| 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 |
| B23Q 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 | Conveyors |
| 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. |

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Devices protecting or preventing injuries to people

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| 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) | 3/005 | . . {having a movable screen or a sensor influencing the switching system} |
| 1/005 | . {Guards for rolls in calendering or other roll machines, e.g. nip guards, finger guards} | 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} |
| 1/02 | . Fixed screens or hoods | 3/008 | . {Devices for directly stopping or interrupting the drive or gear in case of danger to the machine, e.g. devices with clutches} |
| 1/04 | . Screens or hoods rotating with rotary shafts | 3/02 | . Screens or other safety members moving in synchronism with members which move to and fro |
| 1/06 | . specially designed for welding | 3/04 | . . for machines with parts which approach one another during operation, e.g. for stamping presses |
| 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) | 3/06 | . . . in which body parts of the operator are removed from the danger zone on approach of the machine parts |
| 3/001 | . {Safety devices for guarding the human operator of punch presses or like machine tools performing an opening and closing travel} | 3/08 | . in connection with the locking of doors, covers, guards, or like members giving access to moving machine parts |
| 3/003 | . . {by application of a specific control arrangement, e.g. specific switching systems or two-hand control} | 3/10 | . . in which the operation of locking the door or other member causes the machine to start |

- 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](#))
- 3/125 . . {Guards for rolls in calendering or other roll machines, e.g. nip guards, finger guards}
- 3/14 . . the means being photocells or other devices sensitive without mechanical contact
- 3/141 . . . {using sound propagation, e.g. sonar}
- 3/142 . . . {using image capturing devices}
- 3/144 . . . {using light grids}
- 3/145 . . . {using magnetic technology}
- 3/147 . . . {using electro-magnetic technology, e.g. tags or radar}
- 3/148 . . . {using capacitive technology}
- 3/16 . . with feeling members moved by the machine
- 3/18 . Control arrangements requiring the use of both hands
- 3/20 . . for electric control systems
- 3/22 . . for hydraulic or pneumatic control systems
- 3/24 . . for mechanical controls
- 5/00 Emergency means for rendering ineffective a coupling conveying reciprocating movement if the motion of the driven part is prematurely resisted**
- 5/005 . {Overload protection by energy absorbing components, e.g. breaker blocks, shear sections}
- 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](#))**
- 7/02 . by causing the machine to stop on the occurrence of dangerous conditions therein ([devices in bearings affected by abnormal conditions \[F16C\]\(#\)](#))