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:
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

<table>
<thead>
<tr>
<th>1/00</th>
<th>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)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/005</td>
<td>{Guards for rolls in calendering or other roll machines, e.g. nip guards, finger guards}</td>
</tr>
<tr>
<td>1/02</td>
<td>Fixed screens or hoods</td>
</tr>
<tr>
<td>1/04</td>
<td>Screens or hoods rotating with rotary shafts</td>
</tr>
<tr>
<td>1/06</td>
<td>specially designed for welding</td>
</tr>
<tr>
<td>3/00</td>
<td>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)</td>
</tr>
<tr>
<td>3/001</td>
<td>{Safety devices for guarding the human operator of punch presses or like machine tools performing an opening and closing travel}</td>
</tr>
<tr>
<td>3/003</td>
<td>{by application of a specific control arrangement, e.g. specific switching systems or two-hand control}</td>
</tr>
</tbody>
</table>

3/005  . . {having a movable screen or a sensor influencing the switching system} |
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} |
3/008  . . {Devices for directly stopping or interrupting the drive or gear in case of danger to the machine, e.g. devices with clutches} |
3/02  . Screens or other safety members moving in synchronism with members which move to and fro for machines with parts which approach one another during operation, e.g. for stamping presses |
3/04  . . . . in which body parts of the operator are removed from the danger zone on approach of the machine parts |
3/06  . . . . in connection with the locking of doors, covers, guards, or like members giving access to moving machine parts |
3/08  . . . . in which the operation of locking the door or other member causes the machine to start |
Devices protecting or preventing injuries to people

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)