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# **EUROPEAN PATENT APPLICATION**

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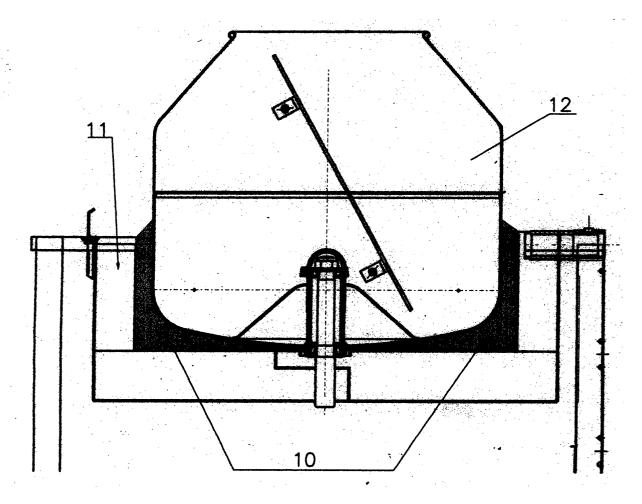
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### (54) Safety device for concrete mixers

(57) A safety device that prevents possible accidents caused by the action of the beaker of concrete mixers is described.



#### **Description**

#### FIELD OF INVENTION:

**[0001]** The present invention refers to the field of blunging machines, in particular the present invention refers to a safety device for concrete mixers.

#### STATE OF THE ART:

**[0002]** As it is well known, the concrete mixers normally employed for the preparation of cement are essentially composed by a mixer vessel, hereinafter named beaker, that is sustained by a carrying stick, which is connected to a driving apparatus.

**[0003]** The presence of moving parts exposes the operator to the risk of accidents. His hands, his arms or the tools that he handles can get stuck in between the moving beaker and its carrying stick.

#### SCOPE OF THE INVENTION:

**[0004]** The scope of the present invention is to overcome the above described problems providing means of increasing the safety of concrete mixers operators.

#### SUMMARY OF THE INVENTION:

**[0005]** The scope of the present invention has been achieved with a safety device as described in the following description and claimed in the main claim.

[0006] Further achievements have been claimed in the dependent claims.

#### LIST OF FIGURES:

**[0007]** The advantages achieved with the present invention will be understood by any skilled person in the art from the following description and from the annexed:

Fig. 1 showing the device according to the present invention installed on a concrete mixer (that is roughly sketched in the figure as well).

#### **DETAILED DESCRIPTION**

**[0008]** Referring to the enclosed Fig. 1, the safety device according to the present invention consists of a frame 10 that is shaped in such a way to be installed in the space between the carrying stick 11 of the concrete mixer and the external surface of the bottom of the beaker 12, filling said space completely, in order to prevent the operator to accidentally enter it.

**[0009]** The frame 10 is fixed to the carrying stick 11 by appropriate means such as screws, pressure joints or any other suitable fixing means.

**[0010]** The frame 10 can be made of any suitable material, for example metal, wood, plastic, rubber, a metal

net etc.

**[0011]** The frame can be made of a single piece of material or it can be made of two or more pieces solidly or loosely assembled together in such a way to occupy the above described space completely, leaving enough room for the revolving mechanism.

**[0012]** Preferably, the device according to the present invention will be made of plastic material or rubber, rigid or semirigid, since these materials are very easy to mould.

**[0013]** If preferred, the frame 10, can be painted in the colors normally used to indicate danger warnings, in such a way to better signal its presence.

#### Claims

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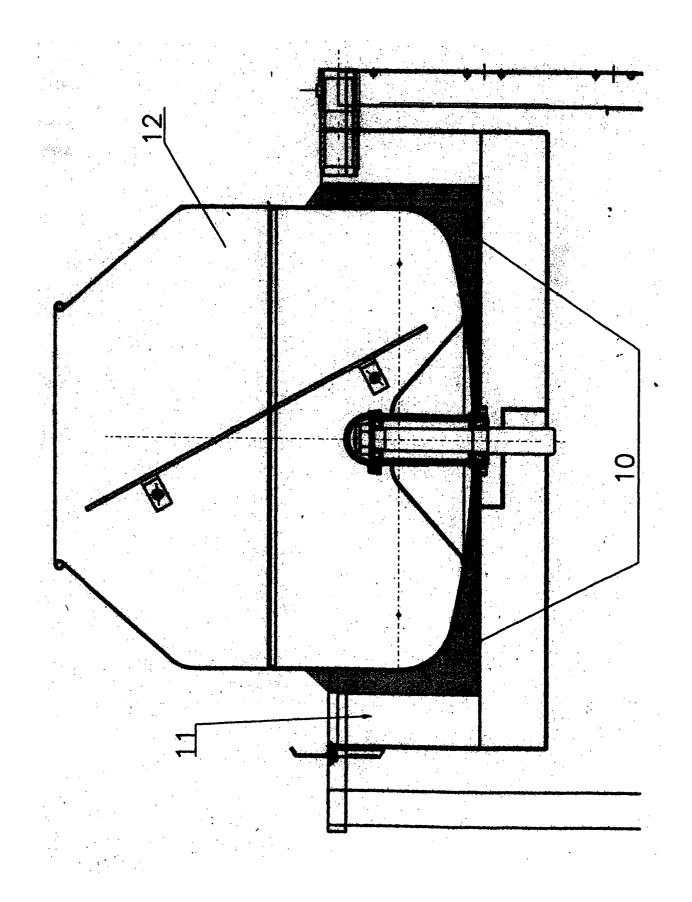
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- 1. Safety device for concrete mixers consisting of a frame (10), shaped in such a way to be installed in the space between the carrying stick (11) of the concrete mixer and the external surface of the bottom of the beaker (12).
- 2. Device according to claim 1 in which the frame (10) is made of plastic material or rubber.
- 3. Device according to claim 2 in which the frame (10) is made of a single piece of material.
- 4. Device according to claim 2 in which the frame (10) is made of two or more pieces solidly or loosely assembled together in such a way to completely occupy the space as defined in claim 1.
- Device according to claims 1 to 4 in which the frame (10) (or its component parts) are fixed to the carrying stick (11) by suitable fixing means.
- **6.** Device according to claim 5 in which said fixing means are screws or pressure joints.
  - 7. Device according to claims 1 to 6 colored in order to highlight its presence.

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# **EUROPEAN SEARCH REPORT**

Application Number EP 03 00 3728

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EPO FORM 1503 03.82 (P04C01)

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 03 00 3728

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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