

Title (en)

Apparatus for inverting a sand mold.

Title (de)

Vorrichtung zum Wenden einer Sandform.

Title (fr)

Appareil pour tourner un moule en sable.

Publication

EP 0018232 A1 19801029 (EN)

Application

EP 80301293 A 19800422

Priority

US 3217979 A 19790423

Abstract (en)

Apparatus for and methods of inverting a sand mold wherein the apparatus comprises opposing upper and lower jaws (104 and 106) each having a plurality of rollers (48). The jaws are supported in a vertical frame (108) rotatably mounted on a stand (102). A rotary actuator (110) is provided to rotate the vertical frame about a horizontal axis and thus invert a sand mold clamped between hydraulically actuated arms (192) of the jaw (106). The rotation of the frame (108) and thus the jaws is controlled by means of a counterbalance valve which regulates the rate of delivery of hydraulic fluid from a pressure compensated pump to the rotary actuator (110). The rate of rotation of the jaws can therefore be adjusted so that even when a load is substantially off centre rotation starts and stops gradually preventing fracture of the mold. The apparatus is electrically controlled to enable a continuous sequence of operations to be performed.

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IPC 8 full level

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CPC (source: EP)

B22C 17/00 (2013.01); **B22D 33/02** (2013.01)

Citation (search report)

- CH 350432 A 19601130 - BADISCHE MASCHINENFABRIK AG SE [DE]
- FR 965845 A 19500922
- CH 356569 A 19610831 - BADISCHE MASCHINENFABRIK AG [DE]
- DE 1133511 C
- FR 1052872 A 19540128 - FERRO ENG CO

Cited by

CN114918384A; CN108687334A; CN117733080A; CN115770858A; CN114474348A; EP0945070A1

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