

Title (en)  
ARC FURNACE

Publication  
**EP 0209735 B1 19900418 (DE)**

Application  
**EP 86108419 A 19860620**

Priority  
DE 3522559 A 19850624

Abstract (en)  
[origin: US4674102A] For the purposes of charging an electric arc furnace the cover (3) of the furnace is lifted somewhat and, being held by a cover carrier mechanism (10, 11), pivoted to the side. The cover carrier mechanism (10, 11) is connected to a portal structure (13) which is rotatable about a vertical axis. At the same time horizontal electrode support arms (5, 6, 7), with the electrodes secured to the free ends thereof, are pivoted to the side. The electrode support arms are secured to vertically displaceable lift columns (19, 20, 21). The lift columns are arranged in one plane and have roller guides (15a, 15b; 16a, 16b) which are disposed in two horizontal planes. The rollers of each pair (15a, 15b . . . ) are so inclined that their axes of rotation include an angle of between 90 DEG and 160 DEG . In that way moments about vertical axes upon pivotal movement of the arrangement and in operation of the furnace can be carried. By virtue of the compact arrangement of the roller guides and lift columns the portal structure may be in the form of a roller-type turntable which may be a commercially available component.

IPC 1-7  
**F27B 14/06; F27D 1/18; H05B 7/10**

IPC 8 full level  
**F27B 3/08** (2006.01); **F27B 14/06** (2006.01); **F27D 1/18** (2006.01); **H05B 7/10** (2006.01)

CPC (source: EP US)  
**F27B 3/085** (2013.01 - EP US); **F27D 1/1816** (2013.01 - EP US); **H05B 7/10** (2013.01 - EP US)

Cited by  
CN103080680A; WO2012041947A1; US9429363B2

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