

Title (en)
HIGH-FREQUENCY INDUCTION FURNACE

Publication
EP 0248727 B1 19900912 (FR)

Application
EP 87401230 A 19870602

Priority
FR 8607970 A 19860603

Abstract (en)
[origin: US4761528A] An induction furnace for melting refractory materials into a molten state by induction from a high frequency alternating current source. The furnace comprises a material holding crucible formed by a substantially cylindrical side wall having a single cylindrical turn. The side wall terminates in end portions which are spaced apart from each other to define a slot therebetween which extends generally longitudinally of the cylindrical wall. The side wall portions are connected to the source of alternating current so that the side wall turn comprises both the crucible and an inductor. An electrically conductive, elongated cooled member is mounted in the slot in spaced relation between each of the end portions. The elongated member is electrically insulated from the end portions to increase the breakdown voltage between the end portions.

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F27B 14/06; F27B 14/10; H05B 6/22; H05B 6/28

IPC 8 full level
C07K 1/06 (2006.01); **C07K 5/06** (2006.01); **C07K 5/08** (2006.01); **C07K 5/10** (2006.01); **C07K 7/06** (2006.01); **C07K 7/08** (2006.01); **F27B 14/06** (2006.01); **F27B 14/10** (2006.01); **H05B 6/22** (2006.01); **H05B 6/28** (2006.01); **F27B 14/08** (2006.01)

CPC (source: EP US)
F27B 14/061 (2013.01 - EP US); **F27B 14/10** (2013.01 - EP US); **H05B 6/22** (2013.01 - EP US); **H05B 6/28** (2013.01 - EP US); **F27B 2014/0837** (2013.01 - EP US)

Cited by
AU608785B2; CN105758178A; US5268925A; US5430757A; US5526375A; FR2797440A1

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