

Title (en)

METHOD AND DEVICES FOR REGULATING THE MEAN INDUCED HEATING POWER IN A FLAT CONDUCTIVE PRODUCT MAINTAINED IN POSITION ELECTROMAGNETICALLY WITHOUT CONTACT

Publication

EP 0090676 B1 19870422 (FR)

Application

EP 83400258 A 19830207

Priority

FR 8204181 A 19820312

Abstract (en)

[origin: US4531037A] A method and system for controlling the heating of a product in an electromagnetic induction heating installation having a pair of essentially identical inductors placed on either side of the product with the poles of one of the inductors of the pair facing the poles of the other inductor. The average heating power electromagnetically induced in a moving or stationary, flat, conducting product positioned without contact by electromagnetic forces correlatively induced by the electromagnetic heating field is controlled by effecting a sequence of inversions of the instantaneous polarity of the poles of one of the inductors with respect to the instantaneous polarity of the corresponding poles of the other inductor. The ratio of the durations during which the polarities are on the one hand opposite and on the other identical determines the average value desired of the heating power induced, and the position of the product remaining practically unchanged by said inversions. The average heating power induced may be controlled by the inversions to effect a reduction of the heating power at the end of heating to thereby effect a reduction of dynamic temperature deviations due to the non-uniform distribution of the densities of the current induced.

IPC 1-7

H05B 6/06; **H05B 6/02**

IPC 8 full level

H05B 6/02 (2006.01); **H05B 6/06** (2006.01)

CPC (source: EP US)

H05B 6/06 (2013.01 - EP US); **H05B 6/104** (2013.01 - EP US)

Citation (examination)

EP 0087345 A1 19830831 - CEM COMP ELECTRO MEC [FR]

Designated contracting state (EPC)

BE CH DE GB IT LI LU

DOCDB simple family (publication)

EP 0090676 A1 19831005; **EP 0090676 B1 19870422**; DE 3371157 D1 19870527; FR 2523395 A1 19830916; FR 2523395 B1 19840601; JP H0221116 B2 19900511; JP S58169789 A 19831006; US 4531037 A 19850723

DOCDB simple family (application)

EP 83400258 A 19830207; DE 3371157 T 19830207; FR 8204181 A 19820312; JP 3840483 A 19830310; US 46494883 A 19830208