

Title (en)

APPARATUS AND METHOD OF INDUCTION-HARDENING MACHINE COMPONENTS WITH PRECISE POWER OUTPUT CONTROL

Publication

EP 0542813 A4 19930915 (EN)

Application

EP 91914109 A 19910725

Priority

- US 9105285 W 19910725
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Abstract (en)

[origin: WO9203026A1] An induction hardening machine for contour hardening of machine components such as gears includes a phase angle detector circuit (112) which produces a pulse for each corresponding detection of a predetermined phase angle of an AC signal. A start switch (SW2) and the pulse produced by the phase detector provide inputs to a circuit (116) which requires concurrence of the pulse and activation of the switch before a predetermined width signal pulse is produced. The predetermined width signal pulse activates power switching devices (114) to supply a predetermined power signal to an RF generator (120) coupled to an induction heating coil (128). Precise induction heating is accomplished via precise control of power input to the RF generator (120).

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H05B 6/06; **H05B 6/14**

IPC 8 full level

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