

Title (en)
IOT BASED POWER SYSTEM

Title (de)
IOT-BASIERTES SPANNUNGSVERSORGUNGSSYSTEM

Title (fr)
SYSTÈME D'ALIMENTATION À BASE D'UN IOT

Publication
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Application
EP 17156494 A 20170216

Priority
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Abstract (en)
A system for powering an accelerator component, comprising an inductive output tube (10), including a thermionic cathode (11) and an anode (13) spaced therefrom, the anode (13) and cathode (11) being operable at a high voltage therebetween to form and accelerate an electron beam, as well as a grid (15) arranged between the cathode (11) and anode (13) and accepting a high frequency control signal to density modulate the beam, a tube power supply (30) for supplying the high voltage between said anode (13) and cathode (11), the tube power supply (30) comprising a cathode line (31) and an anode line (33) connected to the cathode (11) and anode (13), respectively, a grid power supply (40) for supplying a bias voltage between the grid (15) and cathode (11), the grid power supply (40) comprising a grid line (45) and a cathode line (41) connected to the grid (15) and cathode (11), respectively, and a filament power supply (50) for supplying current to heat the cathode (11), the filament power supply (50) comprising a circuit (51) connected to the cathode (11). The cathode (11) is connected to ground and the tube power supply (30) is configured to supply a positive high voltage between said anode and cathode. The tube power supply (30) can be configured to supply said high voltage in a pulsed manner.

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Citation (applicant)
M. MARKS ET AL.: "CPI's 1.3 GHz, 90 kW Pulsed IOT Amplifier", PROCEEDINGS OF IPAC'10, KYOTO, JAPAN, pages 4011 - 4013, Retrieved from the Internet <URL:<http://www.cpii.com/docs/related/30/thpeb061proceedings%20.pdf>>

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