

Title (en)
Inductively coupled plasma generator.

Title (de)
Induktiv gekoppelte Plasmaquelle.

Title (fr)
Générateur de plasma à couplage inductif.

Publication
EP 0568920 A1 19931110 (EN)

Application
EP 93106923 A 19930428

Priority
US 87967892 A 19920507

Abstract (en)
An inductively coupled plasma generator wherein actual power delivered to the load is measured and used to control output power. Means are provided for detecting generated RF voltage and current and multiplying these together to produce a continuous signal representative of actual RF power. Microprocessor means provides a signal representative of commanded power. These signals are compared to provide an error signal for controlling power delivered by the generator. Generator parameters are further monitored and plasma potential is maintained at zero potential with respect to ground to eliminate damage to the circuitry and instruments connected thereto. <IMAGE>

IPC 1-7
H05H 1/30

IPC 8 full level
G01N 21/73 (2006.01); **H01J 49/10** (2006.01); **H05H 1/00** (2006.01); **H05H 1/30** (2006.01); **H05H 1/36** (2006.01); **H05H 1/46** (2006.01)

CPC (source: EP)
H05H 1/36 (2013.01)

Citation (search report)
• [A] US 4500408 A 19850219 - BOYS DONALD R [US], et al
• [A] GB 1109602 A 19680410 - ALBRIGHT & WILSON MFG LTD
• [AD] EP 0155496 A2 19850925 - PERKIN ELMER CORP [US]
• [A] EP 0281158 A2 19880907 - PERKIN ELMER CORP [US]
• [A] US 3909664 A 19750930 - WASKIEWICZ JOHN J, et al
• [A] PATENT ABSTRACTS OF JAPAN vol. 6, no. 169 (C-122)2 September 1982 & JP-A-57 084 743 (FUJITSU) 27 May 1982
• [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 135 (P-457)(2192) 20 May 1986 & JP-A-60 256 819 (NIPPON SHINKU GIJUTSU) 18 December 1985

Cited by
US7314537B2; GB2479702B; CN117545162A; EP0753876A3; CN104135812A; CN115728002A; US7755300B2; US6329757B1; US6740842B2; WO2005031790A1; WO2008054391A1; WO2015121186A1; US8502455B2; US9648719B2; US9526161B2; US7304438B2; US9774086B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0568920 A1 19931110; EP 0568920 B1 19960327; DE 69301952 D1 19960502; DE 69301952 T2 19960808; JP 3167221 B2 20010521; JP H0620793 A 19940128

DOCDB simple family (application)
EP 93106923 A 19930428; DE 69301952 T 19930428; JP 11516993 A 19930420