

Title (en)
MAGNETRON.

Title (de)
MAGNETRON.

Title (fr)
MAGNETRON.

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Application
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Abstract (en)
[origin: WO9321648A1] A magnetron comprises an anode (1) and, coaxially mounted inside it, a cathode consisting of a rod (2) with elements located on its surface and providing for primary and secondary emission. The element providing for primary emission consists of at least one flat disk (3) of an ultrathin foil of a refractory metal with a central opening in it. The element providing for secondary emission consists of at least one cylindrical bushing (4) of an emission-active metal. The external diameter of the disk (3) is larger than that of the bushing (4) by a value within the range of 0.1 to 0.2 of the value of the interelectrode gap. The end faces of the neighbouring disk (3) and bushing (4) join each other. The invention, due to the creation of the electric field intensity needed for obtaining the autoelectronic emission sufficient for excitation of the magnetron, provides for the possibility of the instant start of the magnetron without the need for first heating the cathode.

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CPC (source: EP KR)
H01J 23/075 (2013.01 - EP); **H01J 25/50** (2013.01 - KR)

Citation (search report)
• [A] US 3441781 A 19690429 - COOPER BRIAN FREDERICK
• [AD] FR 1306999 A 19621019 - CIE FRANCAISE DE MICRO ONDES
• [A] PATENT ABSTRACTS OF JAPAN vol. 8, no. 190 (E - 263)<1627> 31 August 1984 (1984-08-31)
• See references of WO 9321648A1

Cited by
US5874806A; CN107045970A; EP1505627A3; EP0694948A3; US5676873A; US6388379B1; US6329753B1; US7474042B2

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