

Title (en)

Cathode assembly and method for pulsed plasma generation

Title (de)

Kathodenbaugruppe und Verfahren zur gepulsten Plasmaerzeugung

Title (fr)

Ensemble cathodique et procédé de génération de plasma pulsé

Publication

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Application

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Priority

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- EP 07786583 A 20070806
- EP 2007006940 W 20070806

Abstract (en)

[origin: WO2009018838A1] A cathode assembly and a method for generation of pulsed plasma are disclosed. The cathode assembly comprises a cathode (2) holder connected to multiple longitudinally aligned cathodes (10,20,30), preferably of the same diameter, and different lengths. The method is characterized by forming an electric arc between the cathodes (10,20,30) in the assembly and an anode (4) by passing DC current of a predetermined magnitude. Once the arc is established the current is reduced to the magnitude sufficient to sustain an electric arc, or a slightly larger magnitude, thereby reducing the area of arc attachment to a single cathode. Once the area of attachment has been reduced, the current is raised to the operational level of the pulse, while the area of attachment does not increase significantly.

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CPC (source: EP US)

H05H 1/34 (2013.01 - EP US); **H05H 1/3478** (2021.05 - EP); **H05H 1/36** (2013.01 - EP)

Citation (search report)

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