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(54) **METHOD OF MANUFACTURING RADIO FREQUENCY (RF) COIL MULTI-DRIVEN RF BASED NEGATIVE ION SOURCE**

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See application file for complete search history.

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(57) **ABSTRACT**

A method of manufacturing a Radio Frequency (RF) coil for a multi-driven RF based negative ion source includes manufacturing a first coil and a second coil using tubes of stainless steel as a substrate material, coating the first coil and the second coil separately; and joining the first coil and the second coil by orbital TIG welding after coating the first coil and the second coil to provide the RF coil for the multi-driven RF based negative ion source.

9 Claims, 8 Drawing Sheets

