

Title (en)

DEVICE FOR DETERMINING THE ELECTRICAL RESISTANCE OF A SYSTEM, AND ASSOCIATED METHOD

Title (de)

VORRICHTUNG ZUR BESTIMMUNG DES ELEKTRISCHEN WIDERSTANDS EINES SYSTEMS UND ZUGEHÖRIGES VERFAHREN

Title (fr)

DISPOSITIF DE DETERMINATION DE LA RESISTANCE ELECTRIQUE D'UN SYSTEME ET PROCEDE ASSOCIE

Publication

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Application

**EP 21739086 A 20210630**

Priority

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Abstract (en)

[origin: WO2022008325A1] The invention relates to a device (1) for determining the electrical resistance of a system (S), the device comprising:  
- a field effect electron emitter (10) suitable for emitting electrons when the electrical emission potential  $V_e$  of the electron emitter is higher than a threshold value  $V_L$ , the emitting end of the emitter being at least partially conductive; - a piece of equipment (20) capable of determining the electrical emission potential  $V_e$  of the electron emitter; - a voltage source (40) designed to apply a potential difference  $E$  to the device (1) and generate an electric field at the emitter (10); - an electron detector (80) capable of detecting all or some of the electrons emitted by the electron emitter so as to measure the intensity of the current  $I_{mes}$  flowing between the emitter and the detector; - electrical connection means (91, 92) designed to electrically connect the system (S) and the device (1) in such a way that the current intensity flowing between the emitter and the detector can also pass through the system.

IPC 8 full level

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CPC (source: EP US)

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