

Title (en)

ELECTRON SOURCE BASED ON FIELD EMISSION AND PRODUCTION PROCESS FOR SAME

Title (de)

ELEKTRONENQUELLE AUF DER BASIS VON FELDEMISSION UND DEREN HERSTELLUNGSVERFAHREN

Title (fr)

SOURCE D'ELECTRONS BASEE SUR L'EMISSION PAR EFFET DE CHAMP ET SON PROCEDE DE FABRICATION

Publication

EP 4049299 A1 20220831 (FR)

Application

EP 20824299 A 20201116

Priority

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Abstract (en)

[origin: WO2021099723A1] The invention relates to an electron source comprising a conductive substrate (11), a conductor arranged facing the substrate, the electron source emitting an electron beam when the conductor is positively biased with respect to the substrate, and an electrically insulating crystal (20) arranged on the substrate, facing the conductor, the substrate delimiting, with the crystal, an empty space (14) comprising at least one asperity (12) located at a distance from the crystal, the crystal having, in a plane parallel to the substrate, dimensions smaller than 100 nm and a thickness of less than 50 nm.

IPC 8 full level

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