

Title (en)
ELECTRON SOURCE FOR GENERATING AN ELECTRON BEAM

Title (de)
ELEKTRONENQUELLE ZUM ERZEUGEN EINES ELEKTRONENSTRAHLS

Title (fr)
SOURCE D'ÉLECTRONS DESTINÉE À GÉNÉRER UN FAISCEAU D'ÉLECTRONS

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Application
EP 20751508 A 20200731

Priority

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Abstract (en)
[origin: WO2021037481A1] The invention relates to an electron source (2) for generating an electron beam (8), comprising a cathode (1) and an anode (4) in the form of a graphene layer (6, 12) which is epitaxially grown with a silicon carbide substrate (5). The invention is suitable for the monolithic production of a miniaturized source of a focused high-energy electron beam, including for the use thereof as an on-chip X-ray source. All components can be produced from or on a single silicon carbide chip.

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