Title (en)
CRYOGEN FREE COOLING APPARATUS AND METHOD

Title (de)
VORRICHTUNG UND VERFAHREN ZUR KRYOGENFREIEN KÜHLUNG

Title (fr)
APPAREIL ET PROCÉDÉ DE REFROIDISSEMENT EXEMPTS DE CRYOGÈNE

Publication
EP 4027081 A2 20220713 (EN)

Application
EP 22154522 A 20100315

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- GB 2010000454 W 20100315

Abstract (en)
A cryogen free cooling apparatus comprises at least one heat radiation shield (54) surrounding a working region (20) and located in a vacuum chamber (4). A cryogen free cooling system has a cooling stage coupled to the heat radiation shield (54). Aligned apertures (56,58) are provided in the heat radiation shield and vacuum chamber walls. Sample loading apparatus has a sample holding device (2) attached to one or more elongate probes (3) for inserting the sample holding device through the aligned apertures (56,58) to the working region (20); and a thermal connector enables the sample holding device to be releasably coupled for heat conduction via said connector to a cold body or cold bodies within the vacuum chamber so as to pre-cool a sample on or in the sample holding device.

IPC 8 full level
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CPC (source: EP US)
F25B 9/14 (2013.01 - EP); **F25B 9/145** (2013.01 - EP); **F25D 19/00** (2013.01 - EP US)

Citation (applicant)
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