

Title (en)

COLD PIECE OF A CRYOGENIC COOLER WITH IMPROVED HEAT TRANSFER

Title (de)

KALTTEIL EINES KRYOKÜHLERS MIT VERBESSERTER WÄRMEÜBERTRAGUNG

Title (fr)

PARTIE FROIDE D'UN CRYOREFROIDISSEUR A TRANSFERT AMELIORE DE LA CHALEUR

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Application

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Abstract (en)

[origin: WO02063220A1] The invention relates to a cold piece of a cryogenic cooler, in particular, for cooling electronic components. It is necessary to minimise the thermal resistance between the cooling medium (11) and the external wall surface on the front face of the cold end of the cold finger (3), in order to achieve an effective cooling of the component. One possibility is the physical enlargement of the outer wall surface of the front face. The surfaces involved in heat transfer may be effectively increased in size with an almost unchanged volume of the expansion chamber, whereby the inner side of the heat transfer element (10) and the end of the regenerator (5) facing the heat transfer element (10) are ribbed such that the ribs (9, 13) interlock with each other in the end position of the regenerator (5).

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