

Title (en)  
Cryogenic refrigerator.

Title (de)  
Kryokälteanlage.

Title (fr)  
Réfrigérateur cryogénique.

Publication  
**EP 0399813 A2 19901128 (EN)**

Application  
**EP 90305632 A 19900523**

Priority  

- JP 12777189 A 19890523
- JP 12777289 A 19890523
- JP 26515889 A 19891013
- JP 26515989 A 19891013
- JP 29757889 A 19891117

Abstract (en)  
A cryogenic refrigerator comprising a closed cylinder (111) provided with an inlet (134) and an outlet (135) for introducing and discharging a coolant gas into and out of the cylinder (111), a displacer (119) slidably housed in the closed cylinder (111) and housing a cooling member (124) therein and having a passage (141) through which the coolant gas flows, a device (142) coaxially arranged in and along the passage (141) of the displacer (119) in which the cooling member (124) is housed to divide the passage (141) into outer and inner ones, a device for reciprocating the displacer (119) in the cylinder (111), and a device for repeating the process of introducing the high pressure coolant gas into the cylinder (111) through the inlet (134) and discharging it out of the cylinder (111), synchronizing with the reciprocating displacer (119).

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**F25B 9/14**

IPC 8 full level  
**F02G 1/053** (2006.01); **F25B 9/14** (2006.01)

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**F02G 1/0535** (2013.01); **F25B 9/14** (2013.01); **F02G 2253/00** (2013.01); **F02G 2258/10** (2013.01); **F25B 2309/003** (2013.01)

Cited by  
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DE FR NL

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