



Brevet canadien / Canadian Patent

Le commissaire aux brevets a reçu une demande de délivrance de brevet visant une invention. Ladite requête satisfait aux exigences de la *Loi sur les brevets*. Le titre et la description de l'invention figurent dans le mémoire descriptif, dont une copie fait partie intégrante du présent document.

Le présent brevet confère à son titulaire et à ses représentants légaux, pour une période expirant vingt ans à compter de la date du dépôt de la demande au Canada, le droit, la faculté et le privilège exclusif de fabriquer, construire, exploiter et vendre à d'autres, pour qu'ils l'exploitent, l'objet de l'invention, sauf jugement en l'espèce rendu par un tribunal compétent, et sous réserve du paiement des taxes périodiques.



The Commissioner of Patents has received a petition for the grant of a patent for an invention. The requirements of the *Patent Act* have been complied with. The title and a description of the invention are contained in the specification, a copy of which forms an integral part of this document.

The present patent grants to its owner and to the legal representatives of its owner, for a term which expires twenty years from the filing date of the application in Canada, the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used, subject to adjudication before any court of competent jurisdiction, and subject to the payment of maintenance fees.

B R E V E T C A N A D I E N

2,571,006

C A N A D I A N P A T E N T

Date à laquelle le brevet a été
accordé et délivré

2013/06/04

Date on which the patent
was granted and issued

Date du dépôt de la demande

2004/06/27

Filing date of the application

Date à laquelle la demande est
devenue accessible au public
pour consultation

2006/02/02

Date on which the application
was made available for
public inspection

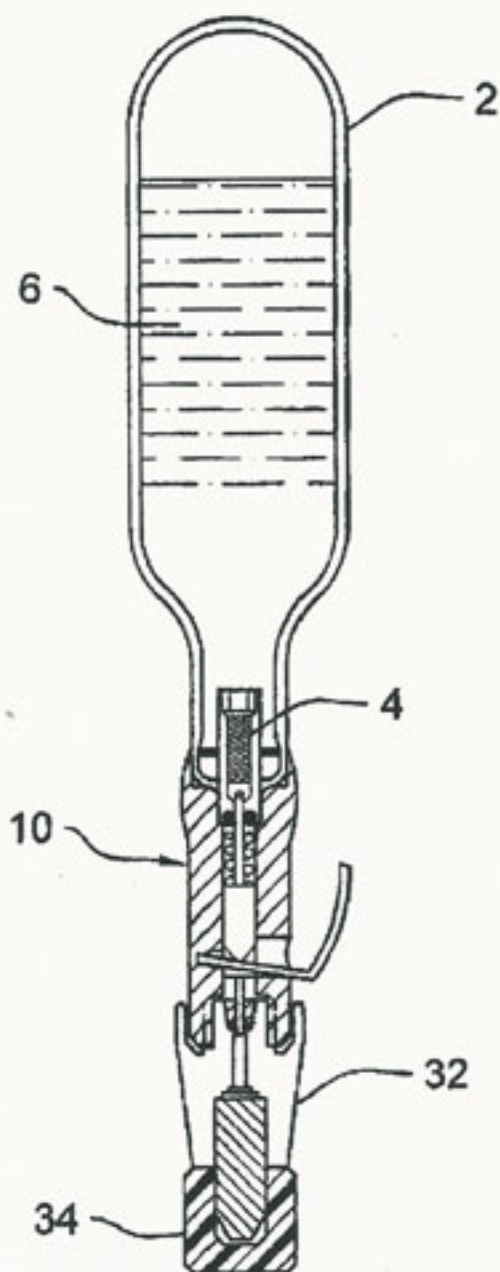
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(54) Titre : DOSEUR DE FLUIDE FRIGORIGENE PERMETTANT LE DOSAGE PRECIS D'UN GAZ LIQUIFIE
 CRYOGENIQUE
 (54) Title: COOLANT DOSING DEVICE FOR FINELY DOSING A LIQUEFIED CRYOGENIC GAS



(57) Abrégé/Abstract:

The invention relates to a refrigerant metering device for the application of cryogenic gas for producing low temperatures as required e.g. in cryosurgery. The invention aims to ensure a disturbance-free operation in spite of often dirty gas and to exclude



(57) Abrégé(suite)/Abstract(continued):

possible operating errors in the connection of capsules of the prior art. According to the invention, the refrigerant metering device comprises a capillary tube that receives gas that has been filtered in the capsule and directly supplies it to the dispenser, thereby ensuring a disturbance-free operation. The low force connection between the capsule and the metering device by means of O-rings that are slipped over ensures a tight seal and an error-free operation.

AN IMPROVED REFRIGERANT METERING DEVICE

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to a refrigerant metering device of the liquid column type for refrigerant systems, which is used in particular in air conditioning systems.

Development of the Invention

Refrigerant metering devices are used in liquid column type refrigerant systems to control the refrigerant flow in the system. The refrigerant metering device is connected to the refrigerant system via a capillary tube. The refrigerant metering device is used to control the refrigerant flow in the system.

However, in the case of a refrigerant metering device of the liquid column type, the refrigerant flow is controlled by means of a float valve. The float valve is actuated by the refrigerant pressure in the system. The float valve is used to control the refrigerant flow in the system.

The operation of the float valve is based on the principle of buoyancy. The float valve is used to control the refrigerant flow in the system.

The working principle of the float valve is based on the principle of buoyancy. The float valve is used to control the refrigerant flow in the system. The float valve is actuated by the refrigerant pressure in the system. The float valve is used to control the refrigerant flow in the system.