

Title (en)
METHOD FOR PRODUCTION OF STROMA-FREE HEMOGLOBIN

Title (de)
VERFAHREN ZUR HERSTELLUNG VON STROMAFREIEM HÄMOGLOBIN

Title (fr)
PROCÉDÉ DE PRODUCTION D'HÉMOGLOBINE EXEMPT DE STROMA

Publication
EP 1121165 A1 20010808 (EN)

Application
EP 99954950 A 19991015

Priority

- US 9924149 W 19991015
- US 10431998 P 19981015
- US 12218099 P 19990301

Abstract (en)

[origin: WO0021591A1] The method employs a commercially-available blood cell separator comprising a computer-controlled centrifuge (2) having a rotor (24) into which a blood processing bag (6) containing donor blood is placed. Once the blood is collected, the process is performed entirely within the enclosed centrifuge bowl, preferably in situ at the donor collection site. In the first step, the blood is centrifuged to separate the plasma from the cellular components. After isolation of the red blood cells from other blood components, the red cells are washed with normal saline or other solution. The red blood cells are then lysed by hypotonic shock to separate the red cell membranes (stroma) and the lysate is collected in a sterile container (44), leaving only the stroma in the centrifuge bowl. The final product can be used as raw material for any of the hemoglobin-based oxygen carriers currently being developed as red cell substitutes. All of the steps are performed within a processing container or blood bag (6) in the bowl centrifuge to minimize handling and maintain sterility. A method for preparing a modified hemoglobin solution incorporates the steps for producing stroma-free hemoglobin, then adding pre-measured reagents to react with the solution and filtering the solution.

IPC 1-7
A61M 1/36

IPC 8 full level
A61L 2/18 (2006.01); **A61K 35/14** (2015.01); **A61K 35/18** (2015.01); **A61M 1/02** (2006.01); **A61M 1/36** (2006.01); **A61P 7/08** (2006.01); **B04B 5/00** (2006.01)

CPC (source: EP KR US)
A61M 1/3692 (2014.02 - EP US); **A61M 1/3693** (2013.01 - EP US); **A61M 1/3696** (2013.01 - EP US); **A61M 1/3698** (2014.02 - EP US); **A61P 7/08** (2018.01 - EP); **C07K 14/805** (2013.01 - KR); **A61M 2202/0433** (2013.01 - EP); **A61M 2205/331** (2013.01 - EP); **A61M 2205/3317** (2013.01 - EP)

C-Set (source: EP)
A61M 2202/0433 + **A61M 2202/0071**

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0021591 A1 20000420; AU 1117000 A 20000501; AU 771465 B2 20040325; BR 9915734 A 20011002; CA 2346825 A1 20000420; CA 2346825 C 20080729; CN 1332646 A 20020123; EP 1121165 A1 20010808; JP 2002527149 A 20020827; KR 20010099700 A 20011109; MX PA01003836 A 20020918

DOCDB simple family (application)
US 9924149 W 19991015; AU 1117000 A 19991015; BR 9915734 A 19991015; CA 2346825 A 19991015; CN 99813429 A 19991015; EP 99954950 A 19991015; JP 2000575563 A 19991015; KR 20017004781 A 20010416; MX PA01003836 A 19991015