



(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:
C12Q 1/04 ^(2006.01) **C12N 5/0735** ^(2010.01)
C12N 5/071 ^(2010.01) **C12N 5/00** ^(2006.01)
C12N 5/07 ^(2010.01) **G01N 33/569** ^(2006.01)

(48) Corrigendum issued on:
02.06.2021 Bulletin 2021/22

(86) International application number:
PCT/US2011/045232

(45) Date of publication and mention
of the grant of the patent:
28.04.2021 Bulletin 2021/17

(87) International publication number:
WO 2012/012803 (26.01.2012 Gazette 2012/04)

(21) Application number: **11810518.8**

(22) Date of filing: **25.07.2011**

(54) **METHODS FOR DETECTION OF RARE SUBPOPULATIONS OF CELLS AND HIGHLY PURIFIED COMPOSITIONS OF CELLS**

VERFAHREN ZUM NACHWEIS SELTENER SUBPOPULATIONEN VON ZELLEN UND HOCHREINER ZUSAMMENSETZUNGEN AUS ZELLEN

PROCÉDÉS DE DÉTECTION DE SOUS-POPULATIONS RARES DE CELLULES ET COMPOSITIONS DE CELLULES TRÈS PURIFIÉES

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

• **GAY, Roger, J.**
Acton, Massachusetts 01720 (US)

(30) Priority: **17.11.2010 US 414770 P**
23.07.2010 US 367038 P

(74) Representative: **Boult Wade Tennant LLP**
Salisbury Square House
8 Salisbury Square
London EC4Y 8AP (GB)

(43) Date of publication of application:
29.05.2013 Bulletin 2013/22

(56) References cited:
WO-A1-99/45094 WO-A1-2008/020675
WO-A2-2009/050657 US-A1- 2002 168 657
US-A1- 2004 133 095 US-A1- 2005 032 126
US-A1- 2005 118 713 US-A1- 2009 233 324
US-A1- 2010 105 100

(60) Divisional application:
21163768.1

(73) Proprietor: **Astellas Institute for Regenerative Medicine**
Westborough, MA 01581 (US)

• **Nil Emre ET AL: "A Comparative Analysis of Human Embryonic Stem Cells Cultured in a Variety of Media Conditions", , 1 January 2008 (2008-01-01), pages 1-8, XP055084892, Retrieved from the Internet:**
URL: [http://www.millipore.com/publications.nsf/a73664f9f981af8c852569b9005b4eee/73159860d3320b8a85257501006111a0/\\$FILE/an1237en00.pdf](http://www.millipore.com/publications.nsf/a73664f9f981af8c852569b9005b4eee/73159860d3320b8a85257501006111a0/$FILE/an1237en00.pdf) [retrieved on 2013-10-22]

(72) Inventors:
• **KLIMANSKAYA, Irina**
Upton, Massachusetts 01568 (US)

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

- Steven D Sheridan ET AL: "Expansion of Human Embryonic Stem Cells by Membrane Based Co-Culture", , 1 January 2007 (2007-01-01), pages 1-1, XP055084897, Retrieved from the Internet: URL:[http://www.millipore.com/publications.nsf/a73664f9f981af8c852569b9005b4eee/b08ebcd4e43a4a25852575050063cd4c/\\$FILE/ps1230en00.pdf](http://www.millipore.com/publications.nsf/a73664f9f981af8c852569b9005b4eee/b08ebcd4e43a4a25852575050063cd4c/$FILE/ps1230en00.pdf) [retrieved on 2013-10-22]
- KLIMANSKAYA IRINA ET AL: "Derivation and comparative assessment of retinal pigment epithelium from human embryonic stem cells using transcriptomics", CLONING AND STEM CELLS, MARY ANN LIEBERT, LARCHMONT, US, vol. 6, no. 3, 1 October 2004 (2004-10-01) , pages 217-245, XP002528297, ISSN: 1536-2302
- Simone Haupt ET AL: "Automated collection of hESC colonies", , 1 June 2009 (2009-06-01), pages 1-2, XP055084926, Retrieved from the Internet: URL:<http://www.nature.com/nmeth/journal/v6/n6/pdf/nmeth.f.252.pdf> [retrieved on 2013-10-22]
- Geisa Martins Faustino ET AL: "Automatic Embryonic Stem Cells Detection and Counting Method in Fluorescence Microscopy Images", Monografias em Ciência da Computação, 1 February 2009 (2009-02-01), pages 1-22, XP055084972, Retrieved from the Internet: URL:ftp://ftp.inf.puc-rio.br/pub/docs/techreports/09_04_faustino.pdf [retrieved on 2013-10-23]
- KARLSSON C ET AL: "Human embryonic stem cell-derived mesenchymal progenitors-Potential in regenerative medicine", STEM CELL RESEARCH, ELSEVIER, NL, vol. 3, no. 1, 1 July 2009 (2009-07-01), pages 39-50, XP026285470, ISSN: 1873-5061, DOI: 10.1016/J.SCR.2009.05.002 [retrieved on 2009-05-19]