

Title (en)

OPERATOR INDEPENDENT PROGRAMMABLE SAMPLE PREPARATION AND ANALYSIS SYSTEM

Title (de)

OPERATORUNABHÄNGIGE PROGRAMMIERBARE PROBENPRÄPARATIONS- UND ANALYSESYSTEM

Title (fr)

SYSTEME D'ANALYSE ET DE PREPARATION D'ECHANTILLON PROGRAMMABLE INDEPENDAMMENT DE L'OPERATEUR

Publication

**EP 1673611 A4 20111130 (EN)**

Application

**EP 04784320 A 20040917**

Priority

- US 2004030429 W 20040917
- US 50375403 P 20030918

Abstract (en)

[origin: WO2005028663A2] The present invention provides a protocol and apparatus for enriching circulating tumor cells and other rare cells from blood, including debris and other components, from samples with high precision and at high throughput rates. This invention discloses an improved processing system from previously described semi-automated sample processing. The system further reduces operator intervention and hands-on time from prior systems. While this system has general utility in processing diverse materials, the system is configured for sample processing of biological specimens to provide an enriched fraction suitable for detection, enumeration and identification of target cells by appropriate analytical methodologies. The presence and quantities of such target cells in a sample specimen can utilized for screening and detection in disease such as cancer, assessing early stage pre-metastatic cancer, monitoring for disease remission in response to therapy and selection of more effective dose regimens or alternative therapies in case of relapse.

IPC 8 full level

**G01N 1/00** (2006.01); **G01N 1/40** (2006.01); **G01N 21/00** (2006.01); **G01N 31/00** (2006.01); **G01N 33/00** (2006.01); **G01N 33/53** (2006.01); **G01N 35/00** (2006.01); **G06T 7/00** (2006.01); **H01L 21/265** (2006.01)

IPC 8 main group level

**C12Q** (2006.01)

CPC (source: EP)

**G01N 1/40** (2013.01); **G01N 35/0098** (2013.01); **G06T 7/70** (2016.12); **G06T 2207/30004** (2013.01)

Citation (search report)

- [XYI] US 6190617 B1 20010220 - CLARK FREDERICK L [US], et al
- [Y] US 2001007312 A1 20010712 - SIDDIQI IQBAL W [US]
- See references of WO 2005028663A2

Citation (examination)

- WO 9415696 A1 19940721 - IMMUNICON CORP [US]
- WO 03018757 A2 20030306 - IMMUNIVEST CORP [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005028663 A2 20050331**; **WO 2005028663 A3 20051222**; CA 2539108 A1 20050331; EP 1673611 A2 20060628; EP 1673611 A4 20111130; JP 2007505626 A 20070315; JP 2011097936 A 20110519; JP 4629675 B2 20110209; JP 5215368 B2 20130619

DOCDB simple family (application)

**US 2004030429 W 20040917**; CA 2539108 A 20040917; EP 04784320 A 20040917; JP 2006527036 A 20040917; JP 2010234618 A 20101019