



(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 72

(51) Int Cl.:
G01N 27/447 ^(2006.01) **G01N 30/74** ^(2006.01)

(86) International application number:
PCT/US2011/023071

(48) Corrigendum issued on:
04.10.2017 Bulletin 2017/40

(87) International publication number:
WO 2011/094648 (04.08.2011 Gazette 2011/31)

(45) Date of publication and mention
of the grant of the patent:
03.05.2017 Bulletin 2017/18

(21) Application number: **11711406.6**

(22) Date of filing: **28.01.2011**

(54) **BIO-ANALYSIS USING INCIDENT AND OUTPUT LIGHT GUIDES COPLANAR WITH A SEPARATION CHANNEL AND AT LEAST ONE BALL-ENDED OPTICAL FIBER**

BIOANALYSE MITTELS LICHTLEITERN IN EINER KOPLANAREN ANORDNUNG MIT EINEM TRENNKANAL UND MINDESTENS EINER GLASFASER MIT KUGELLINSE

ANALYSE BIOLOGIQUE UTILISANT UN GUIDE DE LUMIÈRE INCIDENT ET UN GUIDE DE LUMIÈRE DE SORTIE COPLANAIRES AVEC UN CANAL DE SÉPARATION ET AU MOINS UNE FIBRE OPTIQUE À LENTILLE SPHÉRIQUE

(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

(30) Priority: **28.01.2010 US 299301 P**

(43) Date of publication of application:
05.12.2012 Bulletin 2012/49

(73) Proprietor: **Biopic, Inc.**
New Taipei City (TW)

(72) Inventors:
• **AMIRKHANIAN, Varouj D.**
La Crescenta, CA 91214 (US)
• **TSAL, Shou-kuan**
New Taipei City (TW)

(74) Representative: **Peter, Kenneth William**
K. W. Peter & Co.
Centre Cottage, Bush House Cottages
Edinburgh Technopole
Milton Bridge
Edinburgh, Midlothian EH26 0BA (GB)

(56) References cited:
EP-A1- 1 338 890 WO-A1-2004/023119
WO-A1-2007/002560 WO-A2-01/38844
US-A1- 2004 246 597

- **SCHAFER D., GIBSON E. A., SALIM E. A., PALMER A. E., JIMENEZ R. AND J. SQUIER:** "Microfluidic cell counter with embedded optical fibers fabricated by femtosecond laser ablation and anodic bonding", **OPTICS EXPRESS**, vol. 17, no. 8, 31 March 2009 (2009-03-31) , pages 6068-6073, XP002638027,
- **FLEGER M ET AL:** "Microfabricated polymer analysis chip for optical detection - **MICRO.tec 2003**", 20040415, vol. 151, no. 4, 15 April 2004 (2004-04-15), pages 159-161, XP006022575,

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).

- CAMOU S ET AL: "PDMS 2D optical lens integrated with microfluidic channels: principle and characterization", LAB ON A CHIP, ROYAL SOCIETY OF CHEMISTRY, CAMBRIDGE, GB, vol. 3, no. 1, 1 February 2003 (2003-02-01), pages 40-45, XP002492978, ISSN: 1473-0197, DOI: DOI:10.1039/B211280A
- HSIUNG S K ET AL: "Microcapillary Electrophoresis Chip Device Integrated with Micro Focusing Lens Structures and Its Biomedical Applications", FOOYIN JOURNAL OF HEALTH SCIENCES,, vol. 1, no. 1, 1 August 2009 (2009-08-01), pages 11-20, XP026800020, ISSN: 1877-8607 [retrieved on 2009-08-01]