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[Continued on next page]

(54) Title: BIOLOGIC SAMPLE COLLECTION DEVICES AND METHODS OF PRODUCTION AND USE THEREOF

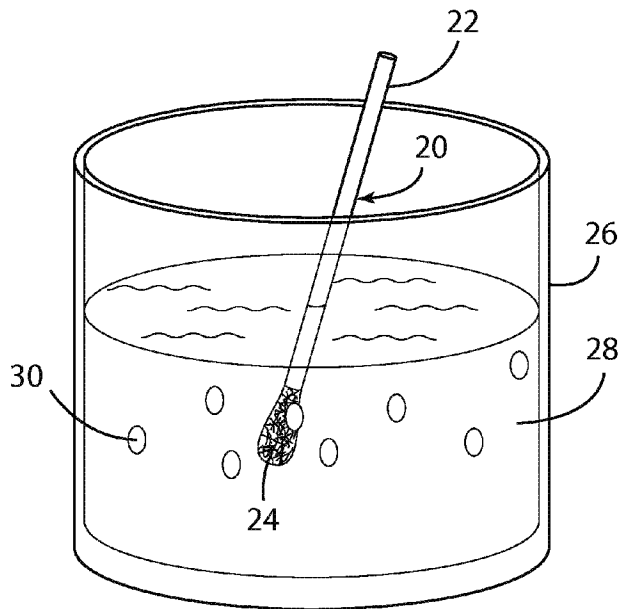


FIG. 1

(57) Abstract: Collection devices and kits for biological sample collection include a biological sample collection device having a hydrophilic swab matrix that includes a modified polycaprolactone (PCL). Methods of production and use thereof are also described herein. The biological sample collection devices, kits and methods described herein are used to collect a biological sample (e.g., blood, buccal cells, etc.) and to enable extraction of nucleic acids (e.g., DNA) from that biological sample so that the nucleic acids can be analyzed (e.g., sequencing and subsequent analyses of DNA).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12M 1/00 (2013.01)

USPC - 435/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - C08G81/02; C12M 1/00; C12Q1/04 (2013.01)

USPC - 435/34, 297.1; 436/01

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

CPC - G01N2001/02 (2013.01)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase, Orbit, Google Patents, Google Scholar, PubMed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	WO 2010/123462 A1 (NALLANI et al) 28 October 2010 (28.10.2010) entire document	1-3, 8, 14-16
Y		4-7, 9-13, 17-19, 30, 31, 43
X -	WO 2012/024407 A1 (ENSOR et al) 23 February 2012 (23.02.2012) entire document	20, 27, 28, 32, 45, 46, 49, 51-53
Y		4, 9-13, 17-19, 21-26, 29-31, 33-44, 47, 48, 50, 54
Y	POK et al. 'In vitro characterization of polycaprolactone matrices generated in aqueous media.' Acta Biomater. 2010 March; 6(3): Pages 1061-1068 entire document	5,6, 33, 34, 39, 41, 54
Y	SPIESS et al. 'Trehalose Is a Potent PCR Enhancer: Lowering of DNA Melting Temperature and Thermal Stabilization of Taq Polymerase by the Disaccharide Trehalose.' Clin Chem. 2004 Jul;50(7): Page 1256-1259. entire document	7
Y	WO 2009/012808 A1 (FEIGLIN) 29 January 2009 (29.01.2009) entire document	10-13 19, 21, 23, 29, 35-38, 40, 44, 47, 48
Y	US 2012/149021 A1 (YUNG et al) 14 June 2012 (14.06.2012) entire document	21, 24, 42
Y	EP 2249140 A1 (SIEDEL et al) 10 November 2010 (10.11.2010) entire document	22

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2006/089297 A1 (CARAGINE et al) 24 August 2006 (24.08.2006) entire document	25, 26, 50
Y	WO 2011/094745 A2 (GIDDINGS et al) 04 August 2011 (04.08.2011) entire document	26