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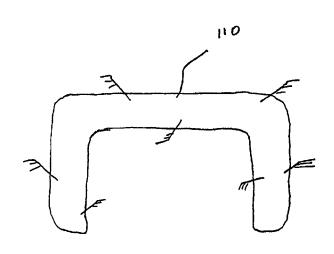


Fig 1A

(57) Abstract: The invention relates to a kit comprising a polymeric surgical fastener (110) having a plurality of reactive members of a specific binding pair attached to a surface of the surgical fastener and a container containing a liquid precursor including complementary reactive members of the specific binding pair. A method for closing a wound in tissue is provided which includes providing such a surgical fastener, and providing tissue with a plurality of complementary reactive members of the specific binding pair, wherein upon contact of the reactive members on the surface of the surgical fastener with the complimentary reactive members on the tissue, covalent bonds are formed between the reactive members and the complementary reactive members, thus adhering the device to the tissue.

INTERNATIONAL SEARCH REPORT

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	SEARCHED coumentation searched (classification system followed by classification	on symbols)							
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EPO-In	ternal, WPI Data								
C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category*	Oitation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.						
А	WO 99/10019 A2 (JONES CARROLL EUG 4 March 1999 (1999-03-04) claims 1-30	1-25							
A,P	EP 2 292 276 A2 (TYCO HEALTHCARE 9 March 2011 (2011-03-09) claims 1-17	1-25							
A,P	WO 2010/095046 A2 (SOFRADIM PRODU [FR]; LADET SEBASTIEN [FR]; GRAV, PHILIPPE [FR]) 26 August 2010 (20 claims 1-23	1-25							
Furtl	her documents are listed in the continuation of Box C.	X See patent family annex.							
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family Date of mailing of the international search report							
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
WO 9910019	A2	04-03-1999	NONE			
EP 2292276	A2	09-03-2011	AU CA CN EP JP US	2010202510 2707885 101933824 2292276 2011005260 2010331880	A1 A A2 A	20-01-2011 29-12-2010 05-01-2011 09-03-2011 13-01-2011 30-12-2010
WO 2010095046	A2	26-08-2010	CA EP US WO	2753216 2398513 2010212829 2010095046	A2 A1	26-08-2010 28-12-2011 26-08-2010 26-08-2010