

Title (en)  
INJECTABLE FILLER

Title (de)  
INJIZIERBARER FÜLLSTOFF

Title (fr)  
MATIÈRE DE REMPLISSAGE INJECTABLE

Publication  
**EP 2776077 A4 20141217 (EN)**

Application  
**EP 12847290 A 20121111**

Priority  
• US 201161558669 P 20111111  
• US 201113301785 A 20111122  
• US 2012064586 W 20121111

Abstract (en)  
[origin: WO2013071216A1] Systems and method are disclosed for forming a biocompatible cross-linked polymer having an interpenetrating polymer network (IPN) by cross-linking a heteropolysaccharide to form a single cross-linked material; and performing one or more additional cross-linkings on the single cross-linked material to form a multiple cross-linked material, wherein the multiple cross-linked material has one or more IPN regions resisting biodegradation in a human body than the single cross-linked material and one or more single cross-linked extensions radiating out from the IPN, wherein the combination of the IPN and the extension provide biodegradation resistance, soft touch feeling, and ease of insertion into the human body.

IPC 8 full level  
**A61L 27/14** (2006.01); **A61L 2/10** (2006.01); **A61L 27/20** (2006.01); **A61L 27/24** (2006.01); **C08B 37/00** (2006.01); **C08B 37/08** (2006.01)

CPC (source: EP)  
**A61L 27/26** (2013.01); **A61L 27/50** (2013.01); **A61L 27/52** (2013.01); **A61L 27/54** (2013.01); **A61L 27/58** (2013.01); **A61L 31/041** (2013.01); **A61L 31/14** (2013.01); **A61L 31/145** (2013.01); **A61L 31/148** (2013.01); **A61L 31/16** (2013.01); **C08B 37/006** (2013.01); **C08B 37/0072** (2013.01); **A61L 2300/402** (2013.01); **A61L 2300/41** (2013.01); **A61L 2300/43** (2013.01); **A61L 2300/604** (2013.01); **A61L 2400/06** (2013.01); **A61L 2430/02** (2013.01); **A61L 2430/04** (2013.01); **A61L 2430/34** (2013.01)

Citation (search report)  
• [X] WO 9704012 A1 19970206 - AAGERUP BENGT [SE]  
• [X] WO 0046253 A1 20000810 - FERMENTECH MED LTD [GB], et al  
• [X] WO 9401468 A1 19940120 - MURST ITALIAN [IT]  
• [X] WO 0046252 A1 20000810 - FERMENTECH MED LTD [GB], et al  
• [X] EP 1837347 A1 20070926 - BIOPOLYMER GMBH & CO KG [DE]  
• See references of WO 2013071216A1

Designated contracting state (EPC)  
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 state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2013071216 A1 20130516**; CN 103917256 A 20140709; EP 2776077 A1 20140917; EP 2776077 A4 20141217; JP 2014521492 A 20140828; KR 20140059238 A 20140515; KR 20150111372 A 20151005

DOCDB simple family (application)  
**US 2012064586 W 20121111**; CN 201280050924 A 20121111; EP 12847290 A 20121111; JP 2014526281 A 20121111; KR 20147007016 A 20121111; KR 20157025171 A 20121111