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[Continued on next page]

(54) **Title:** FRACTURE FIXATION SYSTEMS

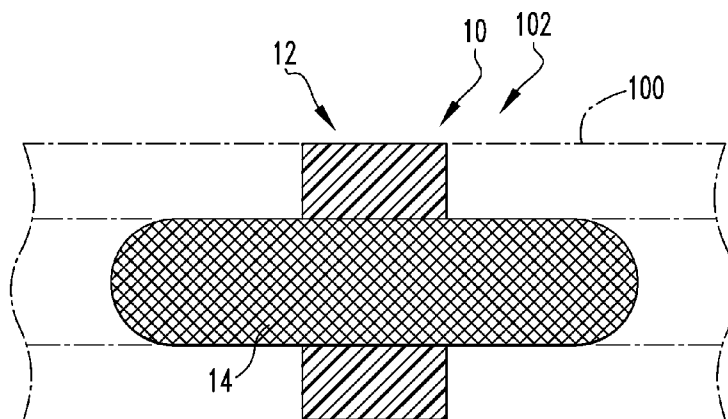


FIG. 1

(57) **Abstract:** Systems for bone fracture repair are disclosed. One system includes a biocompatible putty that may be packed about a bone fracture to provide full loadbearing capabilities within days. The disclosed putties create an osteoconductive scaffold for bone regeneration and degrade over time to harmless resorbable byproducts. Fixation devices for contacting an endosteal wall of an intramedullary (IM) canal of a fractured bone are also disclosed. One such fixation device includes a woven elongated structure fabricated from resorbable polymer filaments. The woven elongated structure has resilient properties that allow the woven structure to be radially compressed and delivered to the IM canal using an insertion tube. When the insertion tube is removed, the woven structure expands towards its relaxed cross-sectional width to engage the endosteal wall. The woven elongated structure is impregnated with a resorbable polymer resin that cures *in situ*, or in the IM canal.

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B. FIELDS SEARCHED

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

Korean utility models and applications for utility models since 1975.
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eKOMPASS(KIPO internal) & Keywords: fracture, fixation, assembly, endosteal wall, intramedullary canal, bone, stent, woven, resin, compressible, injection, insertion, tube, elongated structure, diameter, retention, braided, resorbable polymer and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2005-112804 A1 (MYERS SURGICAL SOLUTIONS, LLC) 01 December 2005 See abstract; figures 5-11; claims 1, 2, 41.	1-12
A	US 2004-0199246 A1 (CHU, M. S. H. et al.) 07 October 2004 See abstract; figures 1A, 5, 7-10.	1-12
A	US 2007-0233105 A1 (NELSON, C. L. et al.) 04 October 2007 See abstract; figures 33, 36, 47.	1-12
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A	US 2003-0134099 A1 (THOMAS H. BARROWS) 17 July 2003 See abstract; claims 1-24.	1-12
A	WO 95-20362 A1 (REILEY, MARK, A. et al.) 03 August 1995 See abstract; figures 14, 15, 20.	1-12

 Further documents are listed in the continuation of Box C. See patent family annex.

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