

Title (en)
EXPANDABLE SPACE FRAME

Title (de)
EXPANDIERBARE DREIDIMENSIONALE STRUKTUR

Title (fr)
STRUCTURE TRIDIMENSIONNELLE EXTENSIBLE

Publication
EP 1079767 A1 20010307 (EN)

Application
EP 99918910 A 19990430

Priority
• US 9909383 W 19990430
• US 7047698 A 19980430

Abstract (en)
[origin: WO9955257A1] An expandable space frame (10) is manufactured by linking a plurality of flexible joints (15) through spacing arms (20) to form a closed structure. The spacing arms are sterically offset, linking the bottom of one joint to the top of the next joint in an upwards stepwise fashion, and then reversing the steps downwards. The offset allows the frame to be collapsed with minimal steric hindrance between the centered joints. This lack of steric hindrance permits a very high ratio of the expansion to compression diameters for the frame. The space frame forms the basis for different types of a stent. A series of individual frames are linked to each other to form a luminal stent. Two or more frames are linked to longitudinal struts to form the support structure for a stent. The stent formed from the expandable space frame can be designed to have a number of additional features as set forth herein.

IPC 1-7
A61F 2/06

IPC 8 full level
A61F 2/86 (2013.01); **A61F 2/00** (2006.01); **A61F 2/07** (2013.01); **A61F 2/82** (2013.01); **A61F 2/848** (2013.01)

CPC (source: EP)
A61F 2/86 (2013.01); **A61F 2/07** (2013.01); **A61F 2002/075** (2013.01); **A61F 2002/3011** (2013.01); **A61F 2002/30677** (2013.01); **A61F 2002/825** (2013.01); **A61F 2002/8483** (2013.01); **A61F 2220/005** (2013.01); **A61F 2220/0058** (2013.01); **A61F 2220/0075** (2013.01); **A61F 2230/0002** (2013.01); **A61F 2230/0017** (2013.01); **A61F 2230/005** (2013.01); **A61F 2230/0091** (2013.01); **A61F 2250/0067** (2013.01)

Citation (search report)
See references of WO 9955257A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9955257 A1 19991104; AU 3671699 A 19991116; EP 1079767 A1 20010307; JP 2002512844 A 20020508

DOCDB simple family (application)
US 9909383 W 19990430; AU 3671699 A 19990430; EP 99918910 A 19990430; JP 2000545464 A 19990430