

Title (en)  
MICROPOROUS STENT AND IMPLANTATION DEVICE

Title (de)  
MIKROPORÖSER STENT UND IMPLANTATIONSVORRICHTUNG

Title (fr)  
EXTENSEUR MICROPOREUX ET DISPOSITIF D'IMPLANTATION

Publication  
**EP 1003444 A4 20040728 (EN)**

Application  
**EP 98943181 A 19980807**

Priority  
• US 9816514 W 19980807  
• US 90771397 A 19970808

Abstract (en)  
[origin: WO9907308A1] A radially expandable stent (10) and stent insertion device (12) for implanting the stent within a body passageway, such as an artery. The stent consists of a plurality of radially expandable cylindrical bands (26) which support a surrounding microporous coating (58). Each of the cylindrical bands are formed from a plurality of undulating sections (42) which are configured to expand uniformly and to impart a uniform stress on the surrounding coating. A plurality of linking members (48) join each pair of adjacent cylindrical bands that are oriented in quadrature positions around each circumference and about the successive pairs of adjacent cylindrical bands. The stent insertion device includes a balloon catheter (12) designed to perform angioplasty as well as implant the stent. The catheter device includes a catheter body (64) having an angioplasty balloon (72) at its distal end. An outer sleeve (76) is slidably supported about the catheter body to deliver and mount the stent on the balloon after the angioplasty procedure is complete. A method for using the balloon catheter device of the present invention is also disclosed.

IPC 1-7  
**A61F 2/04**; **A61F 2/06**; **A61M 29/00**

IPC 8 full level  
**A61F 2/06** (2006.01); **A61F 2/84** (2006.01); **A61F 2/90** (2006.01); **A61F 2/91** (2013.01); **A61F 2/915** (2013.01); **A61F 2/958** (2013.01); **A61M 25/00** (2006.01); **A61F 2/00** (2006.01); **A61F 2/07** (2013.01); **A61F 2/95** (2013.01)

CPC (source: EP)  
**A61F 2/91** (2013.01); **A61F 2/915** (2013.01); **A61F 2/9522** (2020.05); **A61F 2/958** (2013.01); **A61F 2/0077** (2013.01); **A61F 2/07** (2013.01); **A61F 2002/072** (2013.01); **A61F 2002/91533** (2013.01); **A61F 2002/91558** (2013.01); **A61F 2230/0054** (2013.01)

Citation (search report)  
• [Y] WO 9505132 A1 19950223 - GORE & ASS [US]  
• [Y] EP 0686379 A2 19951213 - CARDIOVASCULAR CONCEPTS INC [US]  
• See references of WO 9907308A1

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 9907308 A1 19990218**; AU 741328 B2 20011129; AU 9103098 A 19990301; EP 1003444 A1 20000531; EP 1003444 A4 20040728; JP 2001513359 A 20010904

DOCDB simple family (application)  
**US 9816514 W 19980807**; AU 9103098 A 19980807; EP 98943181 A 19980807; JP 2000506906 A 19980807