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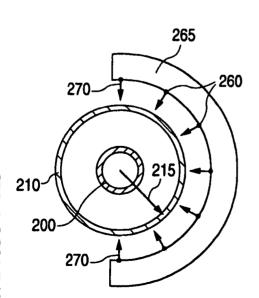
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(57) Abstract: Stents and methods of manufacturing a stents with enhanced fracture toughness are disclosed.

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INTERNATIONAL SEARCH REPORT

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| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
|---|----|---------------------|--|--|--|
| US 2006076708 | A1 | 13-04-2006 | WO | 2007011545 A1 | 25-01-2007 |
| WO 2006014747 | A | 09-02-2006 | EP US | 1773566 A1 2006020330 A1 | 18-04-2007 26-01-2006 |
| WO 9732546 | A | 12-09-1997 | AU CA CN DE DE DK EP ES JP | 734392 B2 2199197 A 2247891 A1 1219115 A 69725120 D1 69725120 T2 886501 T3 0886501 A1 2208886 T3 3815622 B2 2000506753 T | 14-06-2001 22-09-1997 12-09-1997 09-06-1999 30-10-2003 08-07-2004 24-11-2003 30-12-1998 16-06-2004 30-08-2006 06-06-2000 |