

Title (en)
SHIELDED TIP CATHETER.

Title (de)
KATHETER MIT GESCHÜTZTER SPITZE.

Title (fr)
CATHETER EMBOUT PROTEGE.

Publication
EP 0617590 A4 19950712 (EN)

Application
EP 93901307 A 19921216

Priority
• US 9210784 W 19921216
• US 80852791 A 19911216

Abstract (en)
[origin: WO9311711A1] A shielded tip catheter (10, 12) for use with a pulsed energy source (14) for fracturing deposits such as urinary and biliary stones and atherosclerotic plaque in the human body is disclosed. The flexible catheter (10) has a shielded tip structure (12) which is adapted for insertion through a fluid passage in a living body. The tip structure (12) can contain an impact element (30), a scraping implement (52) or a cutting implement (54). An energy source (14) creates repeated rapid vapor expansions adjacent the element (32) causing it (30) to undergo repeated pulse like movements, imparting a series of high-velocity impulses to an adjacent deposit, thereby fracturing or cutting it. The energy source (14) can be a laser with a fiber optic delivery system (24) in the catheter (10) terminating adjacent the impact element (30), or a spark generator (14) with a conductor (24) within the catheter (10) to deliver a fluid vaporizing spark (28) adjacent the element (30).

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Citation (search report)
• [AD] WO 9009762 A1 19900907 - PHYSICAL SCIENCES INC [US], et al
• [AD] US 3823717 A 19740716 - POHLMAN R, et al
• See references of WO 9311711A1

Designated contracting state (EPC)
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WO 9311711 A1 19930624; AU 3278693 A 19930719; EG 19795 A 19960131; EP 0617590 A1 19941005; EP 0617590 A4 19950712; IL 104028 A0 19930513; IL 104028 A 19960618; JP H08501945 A 19960305; MX 9207240 A 19940531

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