

Title (en)  
ASSEMBLED EXPANDING LANCE

Title (de)  
GEBaute AUFWEITLANZE

Title (fr)  
LANCE D'ELARGISSEMENT ASSEMBLEE

Publication  
**EP 1077780 A1 20010228 (DE)**

Application  
**EP 99920838 A 19990503**

Priority  
• DE 19821807 A 19980515  
• EP 9902990 W 19990503

Abstract (en)  
[origin: DE19821807A1] The invention relates to an assembled expanding lance (1) for partially expanding a tubular, linearly running hollow profile by exerting a fluid internal high pressure. The lance contains sealing rings which are each comprised of two components. The first component is formed from a low-abrasive, high pressure resistant elastomer ring (19) which can be elastically deformed by the internal high pressure. The second component is formed by a high pressure resistant support ring (28) which is radially elastic and which, axially, comprises a very high tensile strength. In addition, the elastomer ring comprises a peripheral shoulder (27) which is mounted on the support ring.

IPC 1-7  
**B21D 39/20**

IPC 8 full level  
**B21D 39/20** (2006.01)

CPC (source: EP US)  
**B21D 39/203** (2013.01 - EP US)

Citation (search report)  
See references of WO 9959747A1

Designated contracting state (EPC)  
DE ES GB IT SE

DOCDB simple family (publication)  
**DE 19821807 A1 19991202; DE 19821807 C2 20001019**; DE 59905081 D1 20030522; EP 1077780 A1 20010228; EP 1077780 B1 20030416; ES 2196804 T3 20031216; US 6948709 B1 20050927; WO 9959747 A1 19991125

DOCDB simple family (application)  
**DE 19821807 A 19980515**; DE 59905081 T 19990503; EP 9902990 W 19990503; EP 99920838 A 19990503; ES 99920838 T 19990503; US 70037100 A 20001115