

Title (en)
A TUNNEL WATERPROOFING METHOD

Title (de)
VERFAHREN ZUR WASSERABDICHTUNG VON TUNNELN

Title (fr)
PROCEDE D'IMPERMEABILISATION D'UN TUNNEL

Publication
EP 1290312 A4 20050504 (EN)

Application
EP 01946109 A 20010605

Priority
• JP 2000175769 A 20000612
• US 0118239 W 20010605

Abstract (en)
[origin: WO0196709A1] To provide a waterproofing construction method with which excellent waterproofing capacity can be assured. A tunnel waterproofing method characterized in that a primary spray cement concrete is sprayed on the excavation surface of the tunnel, after which a waterproofing sheet having adhesiveness with a secondary coating cement concrete is installed on said primary spray cement concrete surface and a secondary coating cement concrete is established on said waterproofing sheet surface. A buffer-water conducting layer may also be established on said primary spray cement concrete surface and a multilayer waterproofing sheet having adhesiveness with the applied cement concrete may also be installed as a waterproofing sheet.

IPC 1-7
E21D 11/10; **E21D 11/38**

IPC 8 full level
E21D 11/10 (2006.01); **E21D 11/38** (2006.01)

CPC (source: EP KR)
E21D 11/105 (2013.01 - EP); **E21D 11/38** (2013.01 - KR); **E21D 11/383** (2013.01 - EP)

Citation (search report)
• [X] EP 0898052 A1 19990224 - KOESTER BAUCHEMIE GMBH [DE]
• [XY] WO 0005487 A1 20000203 - MBT HOLDING AG [CH], et al
• [XY] CH 560811 A5 19750415 - SIKA AG
• [XY] CH 688135 A5 19970530 - PIERRE ANDRE FOLLONIER [CH], et al
• [XY] US 3545213 A 19701208 - SEBOR GUSTAV, et al
• [XY] WO 9824738 A1 19980611 - MBT HOLDING AG [CH], et al
• [Y] EP 0725185 A1 19960807 - WOLFSEHER ROLAND F [CH]
• [A] US 5763014 A 19980609 - PICKETT MATTHEW T [US]
• [XY] PATENT ABSTRACTS OF JAPAN vol. 015, no. 432 (M - 1175) 5 November 1991 (1991-11-05)
• See references of WO 0196709A1

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

DOCDB simple family (publication)
WO 0196709 A1 20011220; AT E336641 T1 20060915; AU 2001268196 B2 20051103; AU 2001268196 B8 20051222; AU 6819601 A 20011224; CA 2411273 A1 20011220; CA 2411273 C 20090203; CN 1328475 C 20070725; CN 1524159 A 20040825; DE 60122322 D1 20060928; DE 60122322 T2 20070913; EP 1290312 A1 20030312; EP 1290312 A4 20050504; EP 1290312 B1 20060816; ES 2269425 T3 20070401; HK 1050560 A1 20030627; JP 2001355398 A 20011226; KR 100783985 B1 20071211; KR 20030014710 A 20030219

DOCDB simple family (application)
US 0118239 W 20010605; AT 01946109 T 20010605; AU 2001268196 A 20010605; AU 6819601 A 20010605; CA 2411273 A 20010605; CN 01814009 A 20010605; DE 60122322 T 20010605; EP 01946109 A 20010605; ES 01946109 T 20010605; HK 03102752 A 20030416; JP 2000175769 A 20000612; KR 20027016943 A 20010605