

Title (en)
CORROSION PROTECTION USING A SACRIFICIAL ANODE

Title (de)
KORROSIONSSCHUTZ MIT EINER OPFERANODE

Title (fr)
PROTECTION CONTRE LA CORROSION À L'AIDE D'UNE ANODE SACRIFICIELLE

Publication
EP 2875171 A1 20150527 (EN)

Application
EP 13820454 A 20130718

Priority

- US 201213553514 A 20120719
- US 201213553498 A 20120719
- US 201213553489 A 20120719
- CA 2013050561 W 20130718

Abstract (en)
[origin: WO2014012185A1] Corrosion protection of steel in concrete is provided by locating an anode assembly including both a sacrificial anode and an impressed current anode in contact with the concrete and providing an impressed current from a power supply to the anode. The impressed current anode forms a perforated sleeve surrounding a rod of the sacrificial anode material with an activated ionically-conductive filler material between. The system can be used without the power supply in sacrificial mode or when the power supply is connected, the impressed current anode can be powered to provide an impressed current system and/or to recharge the sacrificial anode from sacrificial anode corrosion products.

IPC 8 full level
C23F 13/20 (2006.01)

CPC (source: EP)
C23F 13/06 (2013.01); **C23F 13/10** (2013.01); **C23F 13/20** (2013.01); **C23F 2201/02** (2013.01); **C23F 2213/21** (2013.01); **C23F 2213/22** (2013.01); **E04C 5/015** (2013.01)

Citation (third parties)
Third party :

- WO 2013156691 A1 20131024 - SOLETANCHE FREYSSINET [FR], et al
- DUGARTE M. ET AL: "GALVANIC POINT ANODES FOR EXTENDING THE SERVICE LIFE OF PATCHED AREAS UPON REINFORCED CONCRETE BRIDGE MEMBERS", FINAL REPORT TO FLORIDA DEPARTMENT OF TRANSPORTATION, 30 September 2009 (2009-09-30), XP055189881, Retrieved from the Internet <URL:HTTP://WWW.DOT.STATE.FL.US/RESEARCH-CENTER/COMPLETED_PROJ/SUMMARY_SMO/FDOT_BD544_09_RPT.PDF>
- "CATHODIC PROTECTION OF STEEL IN CONCRETE (ISO 12696:2012)", BSI STANDARDS PUBLICATION, pages III-VI,1-2,24 - 26,39-41, XP003035519

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014012185 A1 20140123; AU 2013293019 A1 20150122; AU 2013293019 B2 20170824; CA 2879430 A1 20140123; CA 2879430 C 20230613; CA 2936644 A1 20140123; CA 2936644 C 20171031; CA 2944472 A1 20140123; CA 2944472 C 20210518; CA 3089939 A1 20140123; EP 2875171 A1 20150527; EP 2875171 A4 20160706; EP 2875171 B1 20240103; EP 2875171 C0 20240103; EP 3623499 A1 20200318; JP 2015525832 A 20150907; JP 2018076595 A 20180517; JP 2020015984 A 20200130; JP 6273654 B2 20180207; JP 6590902 B2 20191016; JP 6998066 B2 20220118

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CA 2013050561 W 20130718; AU 2013293019 A 20130718; CA 2879430 A 20130718; CA 2936644 A 20130718; CA 2944472 A 20130718; CA 3089939 A 20130718; EP 13820454 A 20130718; EP 19198293 A 20130718; JP 2015521922 A 20130718; JP 2017244445 A 20171220; JP 2019168770 A 20190917