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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) **Title:** WASHING OF CONTAMINATED SOILS

(57) **Abstract:** The process "Washing contaminated soils" solves the problem of cleansing and remediating soils and sediments and their fine fractions contaminated with toxic metals, using washing solution with chelating agents. The chelating agent forms water-soluble complexes with metals and thus facilitates metal removal from soils and sediments into the washing solution. In addition to toxic metals, the process according to the invention enables removal of organic pollutants from soils and sediments by using washing solution amended with surfactants, detergents or organic solvents in addition to chelating agents. The process according to the invention provides for simultaneous separation of the soil and sediment solid phase and used washing solution in a chamber filter press, and effective rinsing of the solid phase to remove all residual mobilized contaminants. The process according to the invention recycles chelating agents and process water in a closed process loop by applying a pH gradient and by using advanced oxidation processes for process water cleansing.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
INV. B09C1/02 B09C1/08  
ADD.  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
B09C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Waschen/4.2.2 - Extrahieren mit Flüssigkeit/4.2.3" In: H. Neumaier, H. Weber: "Atlanten, Erkennen, Bewerten, Sanieren", 31 December 1996 (1996-12-31), Springer, Berlin 3, XP002689202, ISBN: 3540593160 vol. 1, pages 303-344, page 303, line 23 - page 339, line 11 ----- -/--	1-16

Further documents are listed in the continuation of Box C.

See patent family annex.

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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/SI2012/000039

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>L DI PALMA ET AL: "Recovery of EDTA and metal precipitation from soil flushing solutions", JOURNAL OF HAZARDOUS MATERIALS, vol. 103, no. 1-2, 1 October 2003 (2003-10-01), pages 153-168, XP055047766, ISSN: 0304-3894, DOI: 10.1016/S0304-3894(03)00268-1 the whole document</p> <p style="text-align: center;">-----</p>	1-16
A	<p>YANG C ET AL: "Destruction of organic pollutants in reusable wastewater using advanced oxidation technology", CHEMOSPHERE, PERGAMON PRESS, OXFORD, GB, vol. 59, no. 3, 1 April 2005 (2005-04-01), pages 441-445, XP027615450, ISSN: 0045-6535, DOI: 10.1016/J.CHEMOSPHERE.2004.10.020 [retrieved on 2005-04-01] the whole document</p> <p style="text-align: center;">-----</p>	1-16