

Title (en)

An excavation tool and a method for forming a column of consolidated soil

Title (de)

Ausgrabungswerkzeug und Verfahren um eine Säulenstruktur von konsolidierten Boden zu bilden

Title (fr)

Outil d'excavation et procédé de fabrication d'une colonne en sol consolidée

Publication

**EP 1045073 A1 20001018 (EN)**

Application

**EP 00107737 A 20000411**

Priority

IT TP990301 A 19990415

Abstract (en)

An excavation tool (20) includes a tubular central shaft (21) with a vertical axis (x) and a central axial aperture (21a) for supplying a ground-consolidating fluid to nozzles (32) which are directed generally downwardly and arranged along a lower radial edge (29) of one or more blade elements (22) which project radially from the central shaft (21) and are inclined thereto in a helical configuration. The nozzles (32) direct high pressure jets (33) of consolidating fluid for fluidising and at least partially breaking up the soil before it is engaged by the blade elements (22) in their excavation movement. A method is also described for forming a column of consolidated soil by means of such excavation tool. <IMAGE>

IPC 1-7

**E02D 3/12**

IPC 8 full level

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CPC (source: EP)

**E02D 3/126** (2013.01); **E02D 5/36** (2013.01); **E02D 5/46** (2013.01); **E02D 7/24** (2013.01); **E02D 2250/003** (2013.01)

Citation (applicant)

- US 4958962 A 19900925 - SCHELLHORN VERNE L [US]
- US 5396964 A 19950314 - SHELLHORN VERNE L [US], et al

Citation (search report)

- [A] EP 0436954 A1 19910717 - SEIKO KOGYO KABUSHIKI KAISHA [JP]
- [A] EP 0453839 A2 19911030 - MILLGARD ENVIRONMENTAL CORP [US]
- [A] US 5814147 A 19980929 - TALLARD GILBERT [US]

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