

Title (en)
Ground improvement

Title (de)
Verfahren zur Verbesserung eines Baugrundes

Title (fr)
Procédé de compaction du sol

Publication
EP 1382750 A1 20040121 (EN)

Application
EP 03254512 A 20030718

Priority
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• GB 0225943 A 20021107

Abstract (en)
Pillar structures 56 are formed by repeatedly vibrating an elongate lance member down into the ground and withdrawing, filling the resultant cavity with additional material (preferably ameliorated soil) and reintroducing the lance, to cause compaction of the material. A large weight is dropped at the top of each pillar, to flare out the surface region. A pavement 52 is then formed at the surface, by rotavation of the surface layer while mixing in further ground amelioration material. The result is a form of vaulted construction which can be used as a base for building etc. <IMAGE>

IPC 1-7
E02D 3/054; **E02D 3/08**; **E02D 3/02**

IPC 8 full level
E01C 3/04 (2006.01); **E01C 7/36** (2006.01); **E02D 3/054** (2006.01); **E02D 3/08** (2006.01)

CPC (source: EP)
E01C 3/04 (2013.01); **E01C 7/36** (2013.01); **E02D 3/054** (2013.01); **E02D 3/08** (2013.01)

Citation (search report)
• [A] GB 2286613 A 19950823 - ROXBURY LTD [GI]
• [A] EP 0921234 A1 19990609 - BALLAST NEDAM FUNDERINGSTECHNI [NL]
• [A] DE 1409021 A
• [A] GB 2366819 A 20020320 - ROXBURY LTD [GI]
• [A] US 5249892 A 19931005 - FOX NATHANIEL S [US], et al

Cited by
GB2595274A; GB2595274B; EP1498550A3; WO2017147424A1; WO2011001297A1; US10196793B2; US11085160B2

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