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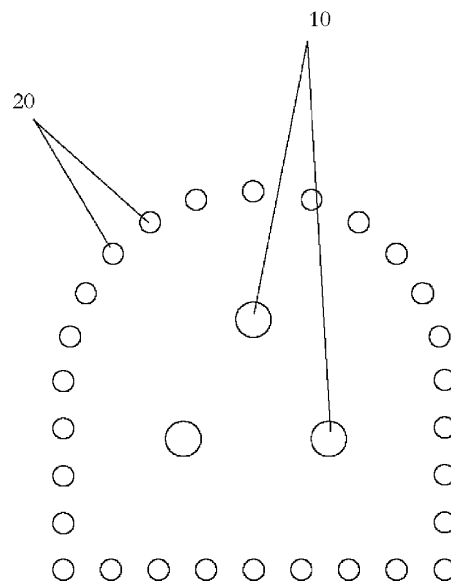


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- (71) **Applicant: HYPERTUNNEL LIMITED** [GB/GB]; 5 Design Centre East, Chelsea Harbour, London SW10 0XF (GB).
- (72) **Inventor: JORDAN, Stephen;** The Mill House, Ballington, Wylfe Wiltshire BA12 0QF (GB).
- (74) **Agent: HANDSOME I.P. LTD;** 27-28 Monmouth Street, Bath, Bath and North East Somerset BA1 2AP (GB).
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(54) **Title:** METHOD AND SYSTEM OF CONSTRUCTING AN UNDERGROUND TUNNEL

[Fig. 1]



(57) **Abstract:** Long tunnels of many kilometres are likely to pass through a range of geologies which may cause problems. Conventional methods involve sampling the geology along a proposed tunnel's length and extrapolating from those samples. The present invention seeks to overcome the disadvantages of the prior art by: drilling a first bore 10 along a first predetermined path, the first bore having a length of at least 25m; drilling a plurality of second bores 20 along respective second predetermined paths, each substantially parallel to the first predetermined path in order to define a substantially prism-shape region therebetween; and excavating material within the substantially prism-shape region to form a tunnel. In this way, data from drilling the first bore 10 and the plurality of second bores 20 can be recorded and used to inform operators as to the types of material through which they will be excavating. Thus, a more complete view of the underlying geology can be achieved before beginning excavations.

[Continued on next page]

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