

ABSTRACTA head for injecting consolidating pressurised fluid mixtures into the ground

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The head (10) includes an outer cylindrical body (12) with at least one upper inlet (16) for fluids, at least one outlet side nozzle (11) and at least one helical duct (13) having a helical central line (m). The duct connects the upper inlet (16) to the nozzle (11) and imparts the fluid flowing through it a helical motion about the longitudinal axis (Z) of the outer body (12) towards the nozzle (11). The helical duct (13) is progressively tapered towards the nozzle (11) and includes a terminal length of the duct which is radiused to the nozzle in a tapered manner, both when viewed in cross-sectional planes (P) parallel to the longitudinal axis (Z) and tangent to the helical central line, as well as when viewed in cross-sectional planes perpendicular to the longitudinal axis (Z).

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(Figure 4)