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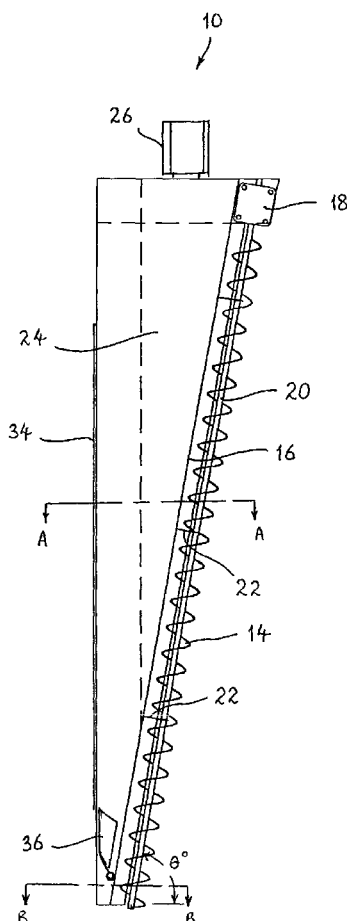
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(54) Title: TRENCHING MACHINE



(57) Abstract: A trenching arm (10) used in a trenching machine for cutting a trench for *in situ* casting of a concrete retaining wall is described. The trenching arm (10) includes a cutting auger (12) having a generally helical cutting blade (14) for cutting into soil and transporting the soil to the surface. The cutting auger (12) is rotatably mounted on a main frame (16) which is designed to be carried in a substantially vertical orientation by a support vehicle (54). An hydraulic motor (18) is mechanically coupled to the cutting auger (12) for rotating the cutting auger. The cutting auger (12) is tilted at an angle of approximately 15° to the vertical. The main frame (16) is provided with a rotatable coupling (26) for mechanically coupling the trenching arm to a boom (28) carried by the support vehicle. In this way, the trenching arm (10) can be made to travel in different directions to form a continuous trench for casting angled, curved or even circular walls. A self-levelling mechanism (90) for adjusting the angle at which the trenching arm (10) is carried by the boom (28) is also described. Advantages of the trenching arm include reduced operating costs and improved efficiency in view of the helical cutting blade employed. The overall weight and size of the trenching arm is also reduced making it easier to transport and manoeuvre.



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