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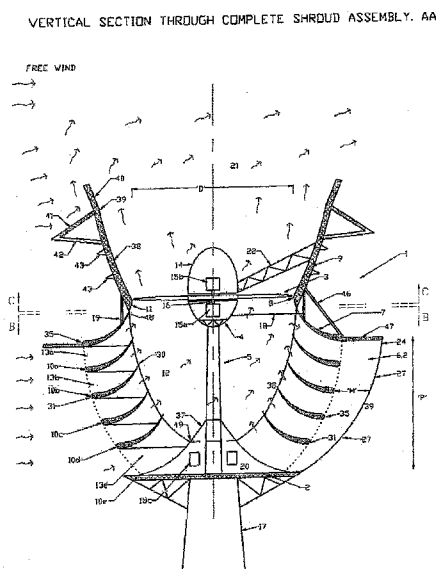
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(54) Title: OMNI-DIRECTIONAL WIND TURBINE



(57) Abstract: An omni-directional, vertical discharge wind turbine assembly (1) including a shroud that includes a diffuser (9) and the structure surrounding and defining the collection chamber (12) that captures wind in any direction and directs it to flow vertically via stacked curved blades of toroidal form (10a-10e). The blades (10a-10e) are secured by vertical walls (6.1-6.3). The diffuser (9) is connected downstream of the rotor (3) and it expands in cross section in the direction of airflow. Wedge (41) and a collar (40) are formed near the outlet of the diffuser (9). The wedge (41) and collar (40) assist in increasing the airflow through the rotor by deflecting the free wind flowing across the outlet of the diffuser.

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