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(54) **LIGHTNING DIVERTER SYSTEM AND METHODS**

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(57) **ABSTRACT**

The invention pertains to a dual telescoping lightning diverter system comprising a first telescoping lightning rod assembly and a second telescoping lightning rod assembly. The second assembly is nested within and operatively coupled to the first. Both assemblies are concentrically aligned, enabling them to move between an extended configuration, for increased operational height, and a retracted configuration for compactness and ease of storage. The system includes various features such as independent grounding paths for each assembly, a conductive break between the two assemblies, and an automatic transition mechanism. This mechanism is controlled by environmental parameters, particularly the detection of static charge. Additional features include threaded sections for secure engagement of the telescoping segments and a hierarchical structure of the telescoping segments for efficient extension and retraction, ensuring the system's adaptability and functionality in various settings.