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Sheridan

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(54) **EPICYCLIC GEAR TRAIN FOR TURBO FAN ENGINE**

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(52) **U.S. Cl.** **60/226.3**; 60/268; 60/39.162; 60/226.1

(58) **Field of Classification Search** 60/677, 60/226.1, 224, 268, 39.162; 475/129, 159
See application file for complete search history.

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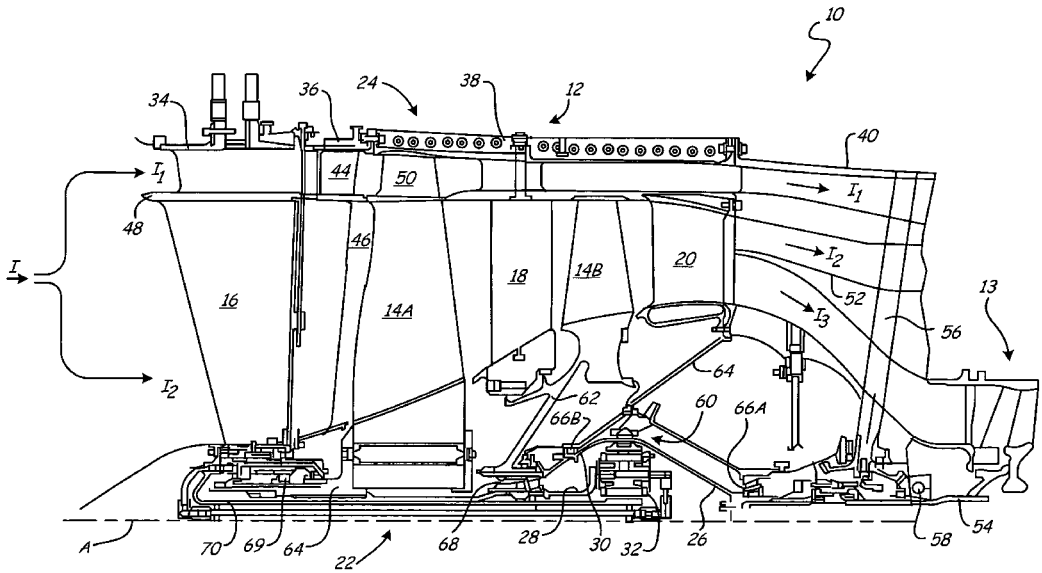
(57) **ABSTRACT**

A two-stage turbofan system for use in a gas turbine engine comprises a first-stage fan shaft, a second-stage fan shaft, a stationary torque tube and a gear system. The second-stage fan shaft connects with a drive shaft in the gas turbine engine such that the second-stage fan shaft is driven at the speed of the drive shaft. The stationary torque tube is connected with a fan case in the gas turbine engine. The gear system is connected to the second-stage fan shaft and the torque tube. The first-stage fan shaft extends from the gear system such that the first-stage fan shaft is driven at a speed reduced from that of the drive shaft.

18 Claims, 4 Drawing Sheets