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Hull et al.(10) **Pub. No.: US 2022/0361300 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **INDUCTION-HEATING SYSTEM
INCLUDING A SUSCEPTOR FOR
GENERATING INDUCTION HEATING
BELOW A SELECTED CURIE
TEMPERATURE****Publication Classification**

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Matsen, Seattle, WA (US)(21) Appl. No.: **17/695,246**(22) Filed: **Mar. 15, 2022****Related U.S. Application Data**(60) Provisional application No. 63/186,467, filed on May
10, 2021.**ABSTRACT**

An induction-heating system includes a susceptor located proximate to a flight surface of an aircraft. The susceptor comprises an array of wires arranged along a first axis. The array of wires is constructed of a ferromagnetic material having a selected Curie temperature. The induction-heating system also includes an electrically conductive coil including a plurality of coil windings oriented substantially perpendicular with respect to the first axis of the array of wires. The electrically conductive coil is configured to generate a magnetic field oriented substantially parallel with respect to the first axis of the array of wires. The electrically conductive coil is positioned to induce induction heating within the ferromagnetic material of the susceptor when the susceptor is below the selected Curie temperature.

