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(54) Title: HYDROFOIL TAKEOFF AND LANDING WITH MULTIPLE HYDROFOILS

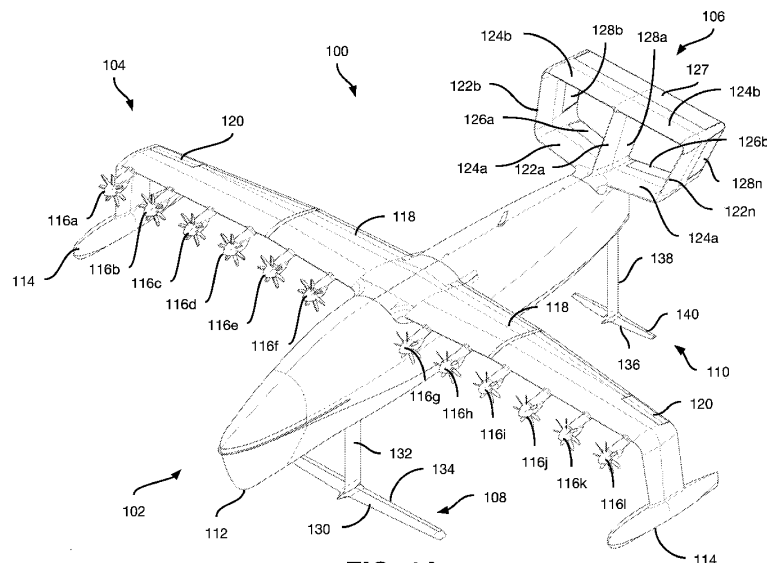


FIG. 1A

(57) Abstract: A craft comprises at least one hull, at least one wing configured to generate upwards aero lift as air flows past the at least one wing to facilitate wing-borne flight of the craft, at least one retractable hydrofoil configured to generate upwards hydrofoil lift during a first mode of operation as water flows past the at least one hydrofoil to facilitate hydrofoil-borne movement of the craft through the water, and a control system that comprises data storage having instruction code stored thereon that causes the control system to during a takeoff operation when the craft is accelerating through the water and is supported by the at least one hydrofoil, control the at least one hydrofoil to generate downwards hydrofoil lift that maintains the at least one hydrofoil submerged at a predetermined hydrofoil depth threshold below the water surface; and when the craft reaches a takeoff condition, cause the least one retractable hydrofoil to release the craft from the water to facilitate wing-borne flight of the craft.

[Continued on next page]

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