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(72) Inventors; and

(71) Applicants: **CHEW, Rong-Jie, David** [SG/SG]; 261 Ponggol Seventeenth Avenue, Northshore Bungalows, Singapore 829711 (SG). **CHEW, Rong-Qi, Phoebe** [SG/SG];

261 Ponggol Seventeenth Avenue, Northshore Bungalows, Singapore 829711 (SG).

(74) Agent: **ORION IP LLP**; 1 Sophia Road, Peace Centre, #07-21, Singapore 228149 (SG).

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(54) Title: A SYSTEM FOR OPTIMISING RUNWAY CAPACITY ON AN AIRPORT RUNWAY AND A METHOD THEREOF

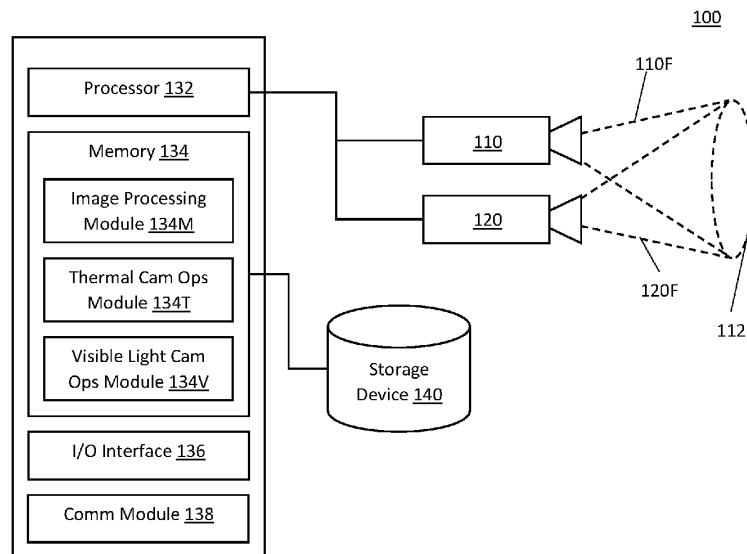


Fig. 1

(57) Abstract: A system for optimising runway capacity on an airport runway is provided. The system includes a thermal camera adapted to monitor an area of interest along a final approach flight path of the aircraft and capture a thermal image of the area of interest, a visible light camera adapted to monitor the area of interest and capture a visible light image of the area of interest, a processor in communication with the thermal camera and the visible light camera, a memory in communication with the processor for storing instructions executable by the processor, wherein the processor is configured to monitor an area of interest along a final approach flight path of one or more aircrafts via the visible light camera and the thermal camera, detect a first aircraft when it enters the area of interest, generate a first set of flight parameters of the first aircraft, detect a second aircraft when it enters the area of interest, generate a second set of flight parameters of the second aircraft, analyse the first set of parameters and the second set of parameters to generate

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at least one of a minimum vertical separation distance and a minimum horizontal separation distance between the first aircraft and the second aircraft to optimise the runway capacity of the airport runway.