

Title (en)
LIFT AUGMENTED GROUND EFFECT PLATFORM

Title (de)
BODENEFFEKT-PLATTFORM MIT ERHÖHTEM AUFTRIEB

Title (fr)
PLATE-FORME HYPERSUSTENTEE A EFFET DE SOL

Publication
EP 0999965 A1 20000517 (EN)

Application
EP 97937180 A 19970808

Priority
US 9714034 W 19970808

Abstract (en)
[origin: WO9907591A1] A lift augmented ground effect platform characterized by two pair of annular concentric air curtain nozzles (32, 33) and supercharge nozzles (46, 64) which direct respective jet streams downward and inward beneath the platform downwardly facing lifting surface (38). The concentric arrangement of the nozzles provides a central supercharged air cushion surrounded by an inner air curtain and a peripheral air cushion surrounded by a peripheral air curtain. This arrangement provides an increased augmentation of the forces acting to raise the platform over that experienced in prior ground effect devices by directing an air flow stream over the downwardly curved peripheral surface of the platform. As the air flows downwardly along the platform's peripheral surface, it creates a pressure differential which provides an additional force supporting the platform. The airflow stream and the jet stream are provided by a propeller or rotating fan (54) mounted exterior or interior of the platform.

IPC 1-7
B60V 1/06

IPC 8 full level
B60V 1/02 (2006.01)

CPC (source: EP)
B60V 1/02 (2013.01)

Cited by
US10464668B2; US11001378B2; US11148801B2; US10875658B2

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9907591 A1 19990218; AU 3975297 A 19990301; EP 0999965 A1 20000517; EP 0999965 A4 20020508

DOCDB simple family (application)
US 9714034 W 19970808; AU 3975297 A 19970808; EP 97937180 A 19970808