

Title (en)  
CRITICAL RUNWAY MARGIN WARNING SYSTEM.

Title (de)  
SYSTEM ZUR WARNUNG DES KRITISCHEN STARTBAHNRANDES.

Title (fr)  
SYSTEME D'AVERTISSEMENT DE MARGE CRITIQUE DE PISTE.

Publication  
**EP 0156911 A4 19870219 (EN)**

Application  
**EP 84903899 A 19840906**

Priority  
US 53096583 A 19830912

Abstract (en)  
[origin: WO8501372A1] A method and apparatus for timely advising the crew of an aircraft during the ground roll portion of takeoff of the relationship between actual velocity attained and computed velocity desired for safe takeoff performance. Means (52) are provided for the crew to enter and store variable runway distances and aircraft load data and for measuring and storing existing meteorological data. Distance and velocity data is measured from the aircraft wheel (70) rotations by infrared light reflections and this information is used with the stored data and predetermined aircraft performance data to compute the relationship between attained velocity and desired velocity for safe takeoff within the limits prescribed by the particular runway. Signals indicating the computed relationships are given the crew by flashing and color coded visible light signals and by an audible warning tone (58). The apparatus includes features (60) to enable the crew to calibrate the apparatus to compensate for variations in wheel diameters which would affect distance measurements.

IPC 1-7  
**G06F 15/50**

IPC 8 full level  
**G05D 1/00** (2006.01)

CPC (source: EP)  
**G05D 1/0083** (2024.01)

Citation (search report)  
• [X] GB 1602477 A 19811111 - COMPANIA DE TRANSPORT AERIAN T  
• See references of WO 8501372A1

Designated contracting state (EPC)  
AT BE CH DE FR GB LI LU NL SE

DOCDB simple family (publication)  
**WO 8501372 A1 19850328**; EP 0156911 A1 19851009; EP 0156911 A4 19870219

DOCDB simple family (application)  
**US 8401430 W 19840906**; EP 84903899 A 19840906