

Title (en)

SYSTEMS AND METHODS FOR IDENTIFYING A NUMBER OF FEASIBLE TARGET TRAFFIC FOR A PAIRED APPROACH

Title (de)

SYSTEME UND VERFAHREN ZUR IDENTIFIZIERUNG EINER ANZAHL VON MÖGLICHEM ZIELVERKEHR FÜR EINEN GEPAARTEN ANSATZ

Title (fr)

SYSTÈMES ET PROCÉDÉS PERMETTANT D'IDENTIFIER UN CERTAIN NOMBRE DE TRAFICS CIBLES RÉALISABLES POUR UNE APPROCHE APPARIÉE

Publication

EP 3965087 A1 20220309 (EN)

Application

EP 21190447 A 20210809

Priority

- IN 202011036716 A 20200826
- US 202017065683 A 20201008

Abstract (en)

Methods and systems for an aircraft entering a terminal radar approach control (TRACON) airspace to identify a number of feasible target traffic for a paired approach for the aircraft. Traffic data is filtered to identify a plurality of neighbor traffic that are entering the TRACON airspace or within the TRACON airspace when the aircraft is entering the TRACON airspace and estimating, concurrently, for each neighbor traffic of the plurality of neighbor traffic: a trajectory, a traffic arrival time at an ideal location for a respective paired approach with the aircraft, a spacing interval between the neighbor traffic and the aircraft for the respective paired approach, and a respective target location for the aircraft to begin the respective paired approach, as a function of the spacing interval. Based on the estimations, the method identifies feasible, marginally feasible, and infeasible targets, and displays this information in an intuitive lateral display.

IPC 8 full level

G08G 5/00 (2006.01); **G08G 5/02** (2006.01)

CPC (source: EP)

G08G 5/0008 (2013.01); **G08G 5/0013** (2013.01); **G08G 5/0021** (2013.01); **G08G 5/0078** (2013.01); **G08G 5/0091** (2013.01); **G08G 5/025** (2013.01)

Citation (search report)

- [I] EP 3509052 A1 20190710 - HONEYWELL INT INC [US]
- [I] DOMINO DAVID A ET AL: "Paired approaches to closely spaced runways: Results of pilot and ATC simulation", 2014 IEEE/AIAA 33RD DIGITAL AVIONICS SYSTEMS CONFERENCE (DASC), IEEE, 5 October 2014 (2014-10-05), XP032700788, DOI: 10.1109/DASC.2014.6979404
- [I] BONE R. ET AL: "Paired approach operational concept", 20TH DASC. 20TH DIGITAL AVIONICS SYSTEMS CONFERENCE, vol. 1, 1 January 2001 (2001-01-01), pages 5B3/1 - 5B3/14, XP055880706, ISBN: 978-0-7803-7034-0, Retrieved from the Internet <URL:https://ieeexplore.ieee.org/stampPDF/getPDF.jsp?tp=&arnumber=963404&ref=aHR0cHM6Ly9pZWVleHBsb3JlLmllZWUub3JnL2RvY3VtZW50Lzk2MzQwNA==> DOI: 10.1109/DASC.2001.963404

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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