SYSTEM AND METHODS FOR AUTOMATED AIRPORT AIR TRAFFIC CONTROL SERVICES

A system and methods for automated airport air traffic control, which envisage: receiving one or more parameters associated with an aircraft, an airside object, an airfield or an airport; calculating one or more routes associated with the aircraft, with the airside object, with the airfield or with the airport, in accordance with the parameters received and in accordance with at least one routing criteria such as environment of the airport, performance of the airside object or the airport, preference of an operator of the aircraft or the airside object, air regulation, airport or airfield related restrictions, time to pushback, fuel saving, optimize use of runway or taxiway or junction in the airport or the airfield, and safety of the aircraft or the airside object; and transmitting the routes to the airside object, to the aircraft, or to a CWP (Controller Working Position), in order to present the routes on a dynamic map (DAM) or on the CWP.
<table>
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<tr>
<th>Category</th>
<th>Citation of document with indication, where appropriate, of relevant passages</th>
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

□ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

1-4, 14

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4
   Method for automated airport air traffic control comprising:
   - receiving parameters of aircraft or airport; calculating routes of aircraft or airport, resp. to parameters received and criteria; transmitting routes to aircraft or CWP (Controller Working Position); and presenting them on dynamic map (DAM) or on CWP
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2. claims: 5-10
   Method for automated airport air traffic control comprising, by a server:
   - receiving sensor or database data,
   - transmitting data for presenting selection menu or for alerting
   ---

3. claims: 11-13
   Method for automated airport air traffic control comprising:
   - receiving message or alert, respect. executing operation or presenting alert to aircraft or Controller Working Position
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4. claim: 14
   Method for automated airport air traffic control comprising:
   - receiving wind sensor data, calculating and sending wake dissipation result to aircraft or Controller Working Position
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5. claims: 15, 16
   Method for automated airport air traffic control comprising:
   - receiving parameters from first and second aircraft or airport; calculating and transmitting to at least one aircraft a next position or a time to pushback for said first or second aircraft
   ---

6. claim: 17
   Method for automated airport air traffic control comprising:
   - receiving first, second of third event of airport; recalculating an aircraft route or determining and transmitting a missed-approach or go-around message to an aircraft
   ---
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

7. claim: 18
   Method for automated airport air traffic control comprising:
   - receiving selection of a route among displayed routes at CWP, transmit it to aircraft
   ---

8. claim: 19
   System comprising a landing gear reporting camera, for imaging aircraft and transmitting alert of potential unlocked gear
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-03-2019

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For more details about this annex: see Official Journal of the European Patent Office, No. 12/82.