



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 84 07 60

Classification of the application (IPC):

G06Q 10/08, G06Q 30/06, G06T 7/70, G06K 9/00, G06F 3/14, G06T 7/20,
G06N 3/04, G06N 3/08, G06Q 20/32, G06Q 20/40, G06V 20/52, H04L 67/04,
H04L 67/131, H04L 67/306

Technical fields searched (IPC):

G06Q, G06T, G06K

| DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim |
| X | US 2015085111 A1 (LAVERY RICHARD J [US]) | 1-3, 6-15 |
| Y | 26 March 2015 (2015-03-26) * paragraphs [0009], [0016], [0022] - [0029] * | 4, 5 |
| Y | US 2013337789 A1 (JOHNSON WILLIAM J [US]) 19 December 2013 (2013-12-19) * paragraphs [0015], [0016], [0395] * | 4, 5 |
| A | US 2015029339 A1 (KOBRES ERICK CHRISTIAN [US] ET AL) 29 January 2015 (2015-01-29) * paragraphs [0033], [0035] - [0038] * | 4, 5 |
| X | US 2013142384 A1 (OFEK EYAL [US]) 06 June 2013 (2013-06-06) * paragraphs [0027] - [0031] * | 1-3, 6, 7, 10-15 |
| A | US 2012137256 A1 (LALANCETTE RICHARD [CA] ET AL) 31 May 2012 (2012-05-31) * paragraphs [0031], [0033], [0041] * | 5 |
| A | US 2016232677 A1 (LIAO KE [CN] ET AL) 11 August 2016 (2016-08-11) * paragraphs [0070], [0079], [0094], [0095], [0128] * | 7, 8, 14 |
| Y | CN 108055390 A (WU DONGHUI) 18 May 2018 (2018-05-18) * paragraphs [0013] - [0018], [0063], [0069], [0073] * | 4, 5 |

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

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| Place of search Munich | Date of completion of the search 23 February 2022 | Examiner Hopper, Eva |
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CATEGORY OF CITED DOCUMENTS

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|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| & : member of the same patent family, corresponding document | L: document cited for other reasons |

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**ANNEX TO SUPPLEMENTARY EUROPEAN
SEARCH REPORT**

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EP 19 84 07 60

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 23-02-2022
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