



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 87 62 64

Classification of the application (IPC):
G07C 5/08, H04W 12/60, H04W 4/44

Technical fields searched (IPC):
H04W

| DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|-------------------------------------|---|-------------------|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim |
| X | US 2020281030 A1 (KOPCHINSKY SCOTT [US] ET AL) 03 September 2020 (2020-09-03) * abstract * * paragraphs [0026] - [0059] * * figures 1,3 * | 1-15 |
| A | US 2016117928 A1 (HODGES ERIC TODD [US] ET AL) 28 April 2016 (2016-04-28) * abstract * * paragraphs [0009] - [0014], [0100] - [0112], [0287] * * figure 1 * | 1-15 |
| A | US 2019178998 A1 (PACALA ANGUS [US] ET AL) 13 June 2019 (2019-06-13) * abstract * * paragraphs [0259] - [0292] * * figure 6 * | 1-15 |

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

| | | |
|---------------------------|--|----------------------------------|
| Place of search Munich | Date of completion of the search 27 June 2024 | Examiner Pandolfi, Alessandra |
|---------------------------|--|----------------------------------|

CATEGORY OF CITED DOCUMENTS

| | |
|---|--|
| 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 |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 87 62 64

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 27-06-2024
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| US 2020281030 A1 | 03-09-2020 | US 2020281030 A1 | 03-09-2020 |
| | | US 2022248478 A1 | 04-08-2022 |
| | | US 2023224980 A1 | 13-07-2023 |
| | | US 2024049311 A1 | 08-02-2024 |
| US 2016117928 A1 | 28-04-2016 | US 2016117928 A1 | 28-04-2016 |
| | | US 2017140652 A1 | 18-05-2017 |
| US 2019178998 A1 | 13-06-2019 | EP 3714291 A1 | 30-09-2020 |
| | | US 2019178998 A1 | 13-06-2019 |
| | | US 2019179029 A1 | 13-06-2019 |
| | | US 2019179320 A1 | 13-06-2019 |
| | | WO 2019113531 A1 | 13-06-2019 |