



# SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 18 84 06 36

**Classification of the application (IPC):**  
H04L 29/02, H04W 74/00, H04W 72/12, H04L 5/00, H04L 1/18

**Technical fields searched (IPC):**  
H04L, H04W

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X Y	<b>MEDIATEK INC:</b> "Remaining issues for Rel-14 NB-IoT 2 HARQ processes", 3GPP DRAFT; R1-1702750 REMAINING ISSUES FOR REL-14 NB-IOT 2 HARQ PROCESSES, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CED, 12 February 2017 (2017-02-12), vol. RAN WG1, no. Athens, Greece; 20170213 - 20170217 URL: <a href="http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/">http://www.3gpp.org/ftp/Meetings_3GPP_SYNC/RAN1/Docs/</a> [retrieved on 12 February 2017 (2017-02-12)] XP051209897 * figure 1 * * section: 3;page 1 * * sections: 4, 5;page 2 - page 3 *	1-7, 9-15 8
X A	<b>QUALCOMM INCORPORATED:</b> "Timing relationships for 2 HARQ processes", 3GPP DRAFT; R1-1708757 DRAFT CR FOR TIMING RELATIONSHIPS FOR TWO HARQ PROCESSES, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLI, 06 May 2017 (2017-05-06), vol. RAN WG1, no. Hangzhou, China; 20170515 - 20170519 URL: <a href="http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_89/Docs/">http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_89/Docs/</a> [retrieved on 06 May 2017 (2017-05-06)] XP051262632 * section: 1;page 1 * * section: 16.6;page 2 - page 3 *	1-5, 9-15 6-8

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 The Hague	Date of completion of the search 21 January 2021	Examiner Atanasovski, Igor
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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 |
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X A	<p><b>ZTE:</b> "Clarification on Rel-14 NPDCCH monitoring" , 3GPP DRAFT; R1-1707799 CLARIFICATION ON REL-14 NPDCCH MONITORING, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANC, 06 May 2017 (2017-05-06), vol. RAN WG1, no. Hangzhou, China; 20170515 - 20170519 URL: <a href="http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_89/Docs/">http://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_89/Docs/</a> [retrieved on 06 May 2017 (2017-05-06)] XP051262078</p> <p>* section: 1;page 1 *</p> <p>* section: 2;page 2 - page 3 *</p>	1-5, 9-15 6-8
Y A	<p>US 2017141901 A1 (RICO ALVARINO ALBERTO [US] ET AL) 18 May 2017 (2017-05-18) * page 6, paragraph 0070 - page 7, paragraph 0072 *</p>	8 1-7, 9-15

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 The Hague	Date of completion of the search 21 January 2021	Examiner Atanasovski, Igor
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# ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 18 84 06 36

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 21-01-2021  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2017141901	A1	18-05-2017	AU 2016351566 A1	26-04-2018
			BR 112018009658 A2	13-11-2018
			CN 108352971 A	31-07-2018
			EP 3375122 A1	19-09-2018
			JP 2019501568 A	17-01-2019
			KR 20180084771 A	25-07-2018
			TW 201720197 A	01-06-2017
			US 2017141901 A1	18-05-2017
			US 2020052855 A1	13-02-2020
			WO 2017083137 A1	18-05-2017