

## Title (en)

TIMING ADVANCE IN A BASE STATION AND WIRELESS DEVICE WITH TIMING ADVANCE GROUPS BASED ON UE CAPABILITIES

## Title (de)

ZEITVERSATZ IN EINER BASISSTATION UND DRAHTLOSE VORRICHTUNG MIT ZEITVERSATZGRUPPEN AUF BASIS VON BENUTZERGERÄTKAPAZITÄTEN

## Title (fr)

AVANCE DE TEMPORISATION DANS UNE STATION DE BASE ET DISPOSITIF SANS FIL POURVU DE GROUPES D'AVANCE DE TEMPORISATION BASÉS SUR DES CAPACITÉS D'UNE UE

## Publication

**EP 2807885 A1 20141203 (EN)**

## Application

**EP 13703256 A 20130125**

## Priority

- US 201261590366 P 20120125
- US 201261618830 P 20120401
- US 201261662191 P 20120620
- US 2013023316 W 20130125

## Abstract (en)

[origin: WO2013112952A1] Introduction of a timing advance group concept into LTE TS 36.321 for release 11. A timing advance group (TA group) comprises up to five cells. For each TA group the UE only needs a single TA timer. The initial timing alignment is achieved by a base station initiated RACH procedure. The configuration of multiple TA groups depends on the UE capabilities report which defines Multi-TA capability of the UE based on each supported band combination. A base station receives radio capability parameters from a wireless device on a first signaling bearer on a primary cell. The radio capability parameters comprise a first sequence of radio configuration parameters. A first radio configuration parameter in the first sequence comprises a first parameter indicating whether multiple timing advance groups are supported for a first band combination. The first band combination is in a second sequence of band combinations. The index of the first radio configuration parameter in the first sequence determines the index of the first band combination in the second sequence.

## IPC 8 full level

**H04W 72/04** (2009.01); **H04W 56/00** (2009.01)

## CPC (source: EP)

**H04W 52/146** (2013.01); **H04W 52/367** (2013.01); **H04W 56/0045** (2013.01); **H04W 52/281** (2013.01); **H04W 52/50** (2013.01); **H04W 74/0833** (2013.01)

## Citation (search report)

See references of WO 2013112952A1

## Citation (examination)

- US 2012008600 A1 20120112 - MARINIER PAUL [CA], et al
- CATT: "Consideration on Multi-TA Capability", vol. RAN WG2, no. Bratislava, Slovakia; 20121008 - 20121012, 28 September 2012 (2012-09-28), XP050666450, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg\_ran/WG2\_RL2/TSGR2\_79bis/Docs/> [retrieved on 20120928]
- CATT: "Multi-TA capability", vol. RAN WG2, no. New Orleans, USA; 20121112 - 20121116, 3 November 2012 (2012-11-03), XP050667456, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg\_ran/WG2\_RL2/TSGR2\_80/Docs/> [retrieved on 20121103]

## Cited by

CN108111285A; CN114554478A

## 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

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**WO 2013112952 A1 20130801**; EP 2807885 A1 20141203; EP 3852466 A1 20210721

## DOCDB simple family (application)

**US 2013023316 W 20130125**; EP 13703256 A 20130125; EP 20212147 A 20130125