

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:

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No. 1 Dongsanhuan Zhonglu, Chaoyang District,,
Beijing

KING & WOOD MALLESONS

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing

(day/month/year)

31 July 2018

Applicant's or agent's file reference

EIE170310PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/CN2017/111143

International filing date (day/month/year)

15 November 2017

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC

H04L 5/00(2006.01)i

Applicant

NOKIA SHANGHAI BELL CO., LTD. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/

**STATE INTELLECTUAL
PROPERTY OFFICE OF THE
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Date of completion of this opinion

24 July 2018

Authorized officer

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/CN2017/111143

Box No. I

Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed.
 - ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).
3. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
 - a. ☐ forming part of the international application as filed:
 - ☐ in the form of an Annex C/ST.25 text file.
 - ☐ on paper or in the form of an image file.
 - b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
 - c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
 - ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/CN2017/111143

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-25	YES
	Claims	None	NO
Inventive step (IS)	Claims	1-25	YES
	Claims	None	NO
Industrial applicability (IA)	Claims	1-25	YES
	Claims	None	NO
2. Citations and explanations :			
	[1] (1) Reference is made to the following document:		
	[2] D1: 3GPP TSG RAN WG1 Meeting 90bis R1-1718303		
	[3] (2) Novelty (PCT33(2)) and Inventive step (PCT33(3))		
	[4] D1 is regarded as the closest prior art, which discloses(sections 1-3): Since gNB is aware of UE's capabilities regarding BWP only after the RRC Connection has been setup for the UE, the Msg4 needs to be transmitted with the same assumptions as Msg2 for UEs in initial access. It's also considered that there are no use cases to transmit Msg4 in some BWP other than the one used to transmit Msg2 to the same UE. Thus, we conclude that PDSCH for RAR and Msg4 are confined within initial active DL BWP. The initial active DL BWP may be the same as bandwidth of CORESET for RMSI scheduling or according to signaling in RMSI.		
	[5] Claims 1,15 differ from D1 essentially in that: switching at the user equipment from a first uplink bandwidth part that does not support a random access channel to a second uplink bandwidth part that has the random access channel configured after the triggering of the random access procedure, wherein the switching is autonomously performed by the user equipment; and performing the random access procedure at the user equipment using the random access channel configured at the second uplink bandwidth part.		
	[6] Therefore, claims 1-20 meet the criteria set out in Article PCT 33(2) with respect to novelty.		
	[7] Since those skilled persons in the art can't obtain obviously the schemes defined by claims 1-20 from the combination of the above-cited document D1 and the common knowledge in the art, claims 1-20 meet the requirements of Article PCT 33(3) with respect to inventive step.		
	[8] Claim 21 refers to any one of claims 3,4,6,7,9,and 11-14, according to the above statements of claims 3,4,6,7,9,and 11-14, claim 21 meet the criteria set out in Article PCT 33(2) with respect to novelty and meet the requirements of Article PCT 33(3) with respect to inventive step.		
	[9] Claims 22-25 refer to any one of claims 1-14, according to the above statements of claims 1-14, claims 22-25 meet the criteria set out in Article PCT 33(2) with respect to novelty and meet the requirements of Article PCT 33(3) with respect to inventive step.		
	[10] (3) Industrial applicability (PCT33(4))		
	[11] Claims 1-25 can find industrial applicability.		