

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year)	19.07.2011
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Applicant's or agent's file reference W6088-000000	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/JP2011/064055	International filing date (day/month/year) 20.06.2011	Priority date (day/month/year) 20.07.2010
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International Patent Classification (IPC) or both national classification and IPC
B60W30/14 (2006.01) i, B60K31/00 (2006.01) i, B60T7/12 (2006.01) i, B60W10/18 (2006.01) i

Applicant
HITACHI AUTOMOTIVE SYSTEMS, LTD.

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 or 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.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

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Box No. I Basis of this 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 43bis.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 filed or furnished:
 - a. (means)
 - on paper
 - in electronic form
 - b. (time)
 - in the international application as filed
 - together with the international application in electronic form
 - subsequently to this Authority for the purposes of search
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 in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	2-9	YES
	Claims	1	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP 2003-507259 A (CONTINETAL TEVES AG & CO. OHG) 25 February 2003, claim 9; paragraphs [0018], [0019] & US 6742850 B1 & WO 2001/014194 A1 & DE 10015224 A1</p> <p>Document 2: JP 11-157424 A (TOYOTA MOTOR CORP.) 15 June 1999, paragraph [0016], fig. 4 & US 5978725 A & DE 19854184 A1</p> <p>Document 3: JP 2001-171497 A (NISSAN MOTOR CO., LTD.) 26 June 2001, paragraphs [0032]-[0035] (Family: none)</p> <p>Document 4: JP 10-338110 A (HONDA MOTOR CO., LTD.) 22 December 1998, paragraph [0014] (Family: none)</p> <p>Document 5: JP 8-198075 A (MAZDA MOTOR CORP.) 06 August 1996, paragraphs [0002], [0031]-[0033] (Family: none)</p> <p style="margin-top: 20px;">The invention as in claim 1 lacks novelty and does not involve an inventive step in the light of document 1 or 2 cited in the ISR. Documents 1 and 2 each describe a travel control device which switches from braking force control by</p>			

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

vehicle-speed control to braking force control by brake pedal operation when the braking force by the pedal operation exceeds the braking force by the vehicle-speed control, if the brake pedal operation is performed during speed reduction control by the vehicle-speed control.

The invention as in claim 2 does not involve an inventive step in the light of documents 1-4 cited in the ISR. Documents 3 and 4 describe a feature wherein when it is determined that pedal operation is terminated, speed-reduction control is terminated during vehicle-speed control. A feature of gradual reduction is a commonly used means.

The invention as in claim 3 does not involve an inventive step in the light of documents 1-4 cited in the ISR. The feature wherein braking force control by vehicle-speed control is turned to zero with switching to the braking force control by pedal operation could be made, as appropriate, by a person skilled in the art.

The invention as in claim 4 does not involve an inventive step in the light of documents 1-5 cited in the ISR. Document 5 describes a feature wherein, if brake pedal operation is performed during speed-reduction control by vehicle-speed control, braking force by the vehicle-speed control is maintained.

The invention as in claims 5-6 does not involve an inventive step in the light of documents 1-5 cited in the ISR. Documents 1 and 2 describe a feature wherein, if brake pedal operation is performed during speed-reduction control by vehicle-speed control, braking force by the vehicle-speed

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Box No. V

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control is reduced. Setting a time lag for such braking-force reduction is an addition of a commonly used means.

The invention as in claims 7-9 does not involve an inventive step in the light of documents 1-5 cited in the ISR. Executing feedback control so as to reach a target control quantity is a commonly used means.