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**Road vehicles—Brake types,
braking mechanics and brake
operation—Vocabulary**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Society of Automotive Engineers of Japan, Inc. (JSAE) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS D 0106**:2005 is replaced with this Standard.

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Road vehicles—Brake types, braking mechanics and brake operation— Vocabulary

Introduction

This Japanese Industrial Standard has been prepared based on the fourth edition of **ISO 611** published in 2003 with some modifications of the technical contents for the corresponding terms. Also, in order to incorporate the updates since 2005, terms not specified in the corresponding International Standard have been added as **JIS**.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified, or the matters not given in the corresponding International Standard. A list of modifications with explanations is given in Annex JA.

1 Scope

This Standard specifies terms related to types, mechanics and operation of brakes used for road vehicles.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 611:2003 *Road vehicles—Braking of automotive vehicles and their trailers—Vocabulary* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are **IDT** (identical), **MOD** (modified), and **NEQ** (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Classification

Classification of terms shall be as follows.

a) Terms related to types

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- 8) Terms related to ordinary operation
- 9) Terms related to friction materials and operation on the surface of drums and discs
- 10) Terms related to tests of friction materials
- 11) Terms related to movement of road vehicles

3 Terms and definitions

Terms and definitions shall be as follows.

- NOTE 1 Where a part of a term appears in brackets “()”, two terms—those with and those without a set of characters in brackets “()”—may be used. In this case, the term with a set of characters in “()” takes the precedence.
- NOTE 2 For reference, the customary term and English equivalent corresponding to the term are shown. Terms in bold face in English equivalent column are those defined in **ISO 611**.

a) **Terms related to types**1) **Braking system**

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
1000	ブレーキ系	BURÊKI KEI	collective term for braking equipment and retarders fitted to the road vehicle	BURÊKI SISUTEMU	braking system

2) **Braking equipment**2.1) **General**

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2000	ブレーキ装置	BURÊKI SÔTI	a series of mechanisms used for controlling road vehicle speed (normally deceleration), stopping or holding the road vehicle at certain position	BURÊKI, SEIDÔ SÔTI	braking equipment, braking device
2001	エネルギー供給装置	ENERUGÎ KYÔKYÛ SÔTI	device which supplies and regulates the energy required for braking		energy-supplying device
2002	エネルギーソース	ENERUGÎ SÔSU	part of the energy-supplying device which generates the energy NOTE: It can be located away from the road vehicle such as air braking system for a trailer but can be the muscular energy.		energy source
2003	制御装置	SEIGYO SÔTI	device which initiates operation of braking system and controls its output		control device
2004	伝達装置	DENTATU SÔTI	device which transmits the energy distributed by the control device		transmission device
2005	ブレーキ回路	BURÊKI KAIRO	part of the transmission of the braking system which can control or transmit, wholly or partly, the energy for the generation of the braking force		circuit

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2006	アクチュエーション 機構	AKUTYUÊSYON KIKÔ	all mechanical components of the transmission device linking operating element to the brake		actuation mechanism

2.2) Classification by application

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2101	常用ブレーキ	ZYÔYÔ BURÊKI	main braking equipment allowing the driver to reduce the speed of road vehicle or to halt during normal driving	HUTTO BURÊKI, SYU BURÊKI, SÂBISU BURÊKI	service braking system
2102	二次ブレーキ	NIZI BURÊKI	braking equipment allowing the driver to reduce the speed of road vehicle or to halt in case of failure of the service braking system, or particularly equipped for emergency	HIZYÔ BURÊKI	secondary braking system
2103	パーキングブレーキ	PÂKINGU BURÊKI	braking equipment allowing the road vehicle to be held stationary mechanically even on an inclined surface, particularly in the absence of driver NOTE: There are hand-operated type, foot-operated type or motor-driven type in control method thereof. There are wheel parking brake and transmission brake in terms of the mounting location of braking equipment.	SAIDO BURÊKI	parking braking system
2104	補助ブレーキ	HOZO BURÊKI	braking equipment allowing the driver, virtually without friction brake to reduce the speed or to travel a long descent at nearly constant speed; it can contain retarders		endurance braking system, additional retarding braking system

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2105	独立形補助ブレーキ (の制御装置)	DOKURITUGATA HOZYO BURÊKI (NO SEIGYO SÔTI)	control device of the endurance braking system independent from the service braking system		independent control device
2106	統合形補助ブレーキ (の制御装置)	TÔGÔGATA HOZYO BURÊKI (NO SEIGYO SÔTI)	control device actuated such that both endurance and service braking systems are applied simulta- neously or suitably phased in operation		integrated control device

2.3) Classification by energy source

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2201	人力ブレーキ	ZINRIKI BURÊKI	device to produce the braking force solely by the physical effort of the driver		muscular energy braking system
2202	非人力エネルギーブ レーキ	HI ZINRIKI ENERUGÎ BURÊKI	braking equipment in which the energy necessary to produce the braking force is supplied by one or more energy-supplying device(s) excluding the physical effort of the driver		non-muscular energy braking system, full-power braking system
2203	フルエアブレーキ	HURUEA BURÊKI	non-muscular energy braking system actuated by compressed air accumulated in the air tank	KÛKI BURÊKI	full-air braking system, air brake
2204	フルパワーハイドロ リックブレーキ	HURUPAWÂ HAIDORORIKKU BURÊKI	non-muscular energy braking system actuated by fluid pressure accumulated in the accumulator or by limiting the flow of the circulating fluid		full-power hydraulic braking system, hydraulic power brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2205	エネルギーアシステッドブレーキ	ENERUGÎ ASISUTEDDO BURÊKI	braking equipment in which the energy necessary to produce the braking force is supplied by the physical effort of the driver, or assisted by one or more energy-supplying device(s)		energy-assisted braking system, power-assisted braking system
2206	バキュームアシステッドブレーキ	BAKYÛMU ASISUTEDDO BURÊKI	energy-assisted braking system for reducing muscular energy by negative pressure at braking	SINKÛ BAIRYOKU BURÊKI	vacuum-assisted braking system, vacuum servo brake
2207	エアアシステッドブレーキ	EA ASISUTEDDO BURÊKI	energy-assisted brake for reducing muscular energy by compressed air accumulated in the air tank at braking	KÛKI BAIRYOKU BURÊKI	compressed air-assisted braking system, air servo brake
2208	ハイドロリックアシステッドブレーキ	HAIDORORIKKU ASISUTEDDO BURÊKI	energy-assisted braking system for reducing muscular energy at braking by fluid pressure accumulated in the accumulator or by fluid pressure generated by limiting the flow of the circulating fluid		hydraulic-assisted braking system, hydraulic servo brake
2209	スプリングブレーキ	SUPURINGU BURÊKI	braking equipment in which the energy required to produce braking force is supplied by one or more compressed springs acting as an energy accumulator		spring braking system
2210	電気ブレーキ	DENKI BURÊKI	brake activated by electrical energy		electric brake

2.4) Classification by control method

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2301	可調ブレーキ	KATYÔ BURÊKI	braking equipment allowing the driver to increase or decrease, to a sufficiently fine degree, the braking force by operation of the control device		graduated braking

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2302	フットブレーキ	HUTTO BURÊKI	braking equipment operated by foot pressure		foot brake
2303	ハンドブレーキ	HANDO BURÊKI	braking equipment operated by hand		hand brake
2304	慣性ブレーキ	KANSEI BURÊKI	braking equipment in which the energy necessary to produce the braking force arises from the thrust generated by the trailer approaching the tractor	INÂSYA BURÊKI	inertia braking system
2305	電子制御ブレーキ装置, EBS	DENSI SEIGYO BURÊKI SÔTI, Î-BÎ-ESU	braking equipment in which an electrical signal controls the devices which produce the braking forces		electronic braking system

2.5) Classification by transmission medium

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2401	メカニカルブレーキ	MEKANIKARU BURÊKI	braking equipment in which the actuation forces are transmitted by mechanical means such as levers, rods or cables		mechanical braking system
2402	ハイドロリックブレーキ	HAIDORORIKKU BURÊKI	braking equipment in which the actuation forces are transmitted by fluid pressure	OIRU BURÊKI	hydraulic braking system
2403	エアブレーキ	EA BURÊKI	braking equipment in which the actuation forces are transmitted by air pressure NOTE: There are compressed air braking system and vacuum braking system.		pneumatic braking system
2404	エアオーバハイドロリックブレーキ	EA ÔBA HAIDORORIKKU BURÊKI	braking equipment having stored pneumatic energy, hydraulically actuated brakes and transmission means incorporating a pneumatic-to-hydraulic converter	HUKUGÔ BURÊKI	air-over-hydraulic braking system

2.6) Classification by connection method

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2501	シングルサーキット ブレーキ	SINGURU SÂKITTO BURÊKI	braking equipment in which the actuation forces are transmitted employing a single circuit		single-circuit braking system
2502	デュアルサーキット ブレーキ	ZYUARU SÂKITTO BURÊKI	braking equipment having a transmission employing two separate circuits in which only two circuits are able to transmit the energy necessary to generate the actuation force to those brake(s) connected to the system	SUPURITTO SISUTEMU	dual-circuit braking system
2503	マルチサーキットブ レーキ	MARUTI SÂKITTO BURÊKI	braking equipment having a transmission employing plural separate circuits in which every circuits are able to transmit the energy necessary to generate the actuation force to those brake(s) connected to the system		multi-circuit braking system

2.7) Classification by mounting location

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2601	フロントブレーキ	HURONTO BURÊKI	braking equipment mounted to the front wheel		front brake
2602	リヤブレーキ	RIYA BURÊKI	braking equipment mounted to the rear wheel		rear brake
2603	センタブレーキ	SENTA BURÊKI	braking equipment mounted to the transmission or drive shaft		transmission brake
2604	インボードブレーキ	INBÔDO BURÊKI	braking equipment mounted to both ends of the differential gear, which causes braking force via the axle		inboard brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
2605	ホイールブレーキ	HOÎRU BURÊKI	braking equipment mounted in the vicinity of the wheel		wheel brake

3) Mechanism and components of brakes

3.1) Brake mechanism

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3000	ブレーキ機構	BURÊKI KIKÔ	mechanism of a braking in which the forces opposing the movement or tendency to movement of the road vehicle are developed		brake, <u>brake mechanism</u>

3.2) Friction brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3100	摩擦ブレーキ	MASATU BURÊKI	brake mechanism in which the friction forces are developed NOTE: A friction brake in which the effect of the actuation force or forces is increased by the friction forces is called a “self-servo brake”.		friction brake

3.3) Drum brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3200	ドラムブレーキ	DORAMU BURÊKI	friction brake which causes braking forces by pressing friction material against the internal or external surface of a drum		drum brake
3201	内拡式ドラムブレーキ	NAIKAKUSIKI DORAMU BURÊKI	drum brake which causes braking force by pressing friction material against the internal surface of the drum	DORAMU BURÊKI	internal expanding brake
3202	ツリーディングシューブレーキ	TÛRÎZINGU SYÛ BURÊKI	internal expanding brake in which two sets of leading shoes are combined by rotation of the drum	NI-ERU BURÊKI, TÛRÎZINGU BURÊKI	two leading shoe brake
3203	デュオツリーディングシューブレーキ	ZYUO TÛRÎZINGU SYÛ BURÊKI	internal expanding brake acting as the two leading shoe brake for both normal and reverse rotation	DÊ-NI-ERU BURÊKI, ZYUARU TÛRÎZINGU BURÊKI	duo two leading shoe brake
3204	ツートレーリングシューブレーキ	TÛTORÊRINGU SYÛ BURÊKI	internal expanding brake in which two sets of trailing shoes are combined by rotation of the drum	NI-TÊ BURÊKI, TÛTORÊRINGU BURÊKI	two trailing shoe brake
3205	デュオツートレーリングシューブレーキ	ZYUO TÛTORÊRINGU SYÛ BURÊKI	internal expanding brake acting as the two trailing shoe brake for both normal and reverse rotation	DÊ-NI-TÊ BURÊKI, ZYUARU TÛTORÊRINGU BURÊKI	duo two trailing shoe brake
3206	リーディングトレイリングシューブレーキ	RÎZINGU TORÊRINGU SYÛ BURÊKI	internal expanding brake in which both the leading shoe and trailing shoe are combined by rotation of the drum	ERU-TÊ BURÊKI	leading trailing shoe brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3207	ユニサーボブレーキ	YUNISÂBO BURÊKI	internal expanding brake which increases the pressing force of one shoe towards the internal surface of the drum by the adjacent shoe for rotation in one direction only	YÛ-ESU BURÊKI	uni-servo brake
3208	デュオサーボブレーキ	ZYUO SÂBO BURÊKI	internal expanding brake which increases the pressing force of one shoe towards the internal surface of the drum by the adjacent shoe for both normal and reverse rotation	DÊ-ESU BUREKI	duo-servo brake
3209	外部収縮式ドラムブレーキ	GAIBU SYÛSYUKUSIKI DORAMU BURÊKI	drum brake which causes braking force by pressing friction material against the external surface of the drum		external contracting brake
3210	バンドブレーキ	BANDO BURÊKI	external contracting brake which causes braking force by pressing a band with adhesive friction material against the external surface of the drum		band brake

3.4) Disc brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3300	ディスクブレーキ	ZISUKU BURÊKI	friction brake which causes braking forces by pressing the friction material against both surfaces of discs		disc brake
3301	フィクストキャリパ ディスクブレーキ	HIKUSUTO KYARIPA ZISUKU BURÊKI	disc brake which causes braking force while a calliper equipped with a pressurising mechanism at both ends of the disc is in the fixed state	TAIKÔ PISUTON KYARIPA ZISUKU BURÊKI	disc brake with fixed calliper

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3302	フローティングキャ リパディスクブ レーキ	HURÔTINGU KYARIPA ZISUKU BURÊKI	disc brake which causes braking force while a caliper equipped with a pressurising mechanism at only one side of the disc is floated and also exerts a pressurising force to the opposite side	HUDÔ KYARIPA ZISUKU BURÊKI	disc brake with floating calliper
3303	フローティングディ スクブレーキ	HURÔTINGU ZISUKU BURÊKI	disc brake equipped with a pressurising mechanism at one side only by the floating disc which also exerts the pressurising force of the calliper to the opposite side, and causes braking force		floating disc brake

3.5) Other brake mechanism

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3401	ウェッジブレーキ	UEZZI BURÊKI	drum brake which causes braking force by pressing friction material against the internal surface of the drum by the movement of a wedge		wedge brake
3402	カムブレーキ	KAMU BURÊKI	drum brake which causes braking force by pressing friction material against the internal surface of the drum by the movement of a cam NOTE: The S-shaped cam brake is cited as an example.		cam brake
3403	ポジティブエンゲ ジメントブレーキ	POZITIBU ENGÊZIMENTO BURÊKI	brake mechanism in which non-rotating elements of the road vehicle prevent, by positive engagement, the movement of components attached to a wheel or an assembly of wheels NOTE: Positive engagement brakes are normally only applied when the road vehicle is stationary (lock).		positive engagement brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3404	(スプリングブレーキアクチュエータの)補助解除装置	(SUPURINGU BURÊKI AKUTYUÊTA NO) HOZYO KAIZYO SÔTI	device allowing the removal of the braking force resulting from the spring brake actuator when hydraulic or pneumatic pressure has fallen below the hold-off pressure as a result of a failure		auxiliary release device for spring brake actuator
3405	ブレーキアジャスタ	BURÊKI AZYASUTA	device which adjusts the clearance between the friction material and the drum or disc, automatically or by other means, while the braking force is not applied Example: auto-adjuster, manual-adjuster		brake adjustment device, wear compensation device

3.6) Devices relating to braking force proportioning

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3500	制動力配分装置	SEIDÔRYOKU HAIBUN SÔTI	device to modify the braking force automatically or otherwise as a function of load, fluid pressure, deceleration or other parameters for the purpose of achieving braking force distribution		braking force proportioning device, brake force distribution device
3501	荷重検知式制動力配分装置	KAZYÛ KENTISIKI SEIDÔRYOKU HAIBUN SÔTI	device which automatically adjusts the braking force on one or more wheels of the road vehicle by detecting dynamic load or displacement value on those wheels or axles Example: load sensor type proportioning valve		load-sensing device, load-sensing braking force distribution device
3502	圧力検知式制動力配分装置	ATURYOKU KENTISIKI SEIDÔRYOKU HAIBUN SÔTI	device which automatically adjusts the braking force on one or more wheels of the road vehicle with a designed relationship to the input pressure Example: proportioning valve		pressure-sensing device, pressure-sensing braking force distribution device

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3503	減速度検知式制動力 配分装置	GENSOKUDO KENTISIKI SEIDÔRYOKU HAIBUN SÔTI	device which automatically adjusts the braking force on one or more wheels by detecting the deceleration of the vehicle Example: deceleration detection type proportioning valve		deceleration-sensing device , deceleration-sensing braking force distribution device

3.7) Friction brake components

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3600	摩擦ブレーキコン ポーネント	MASATU BURÊKI KONPÔNENTO	collective term for brake components which obtain the braking force by pressing the friction material against the drum or the disc		friction brake components
3601	ブレーキライニング アッセンブリ	BURÊKI RAININGU ASSEMBURI	component of drum brake or disc brake which is pressed against the drum or the disc, respectively, to produce the friction force		brake lining assembly
3602	シューアッセンブリ	SYÛ ASSEMBURI	brake lining assembly of a drum brake		shoe assembly
3603	リーディングシュー アッセンブリ	RÎZINGU SYÛ ASSEMBURI	shoe assembly on which the effect of the actuation force is increased by the friction forces generated between the rotating drum and the brake lining		leading shoe assembly
3604	トレーリングシュー アッセンブリ	TORÊRINGU SYÛ ASSEMBURI	shoe assembly on which the effect of the actuation force is decreased by the friction forces generated between the rotating drum and the brake lining		trailing shoe assembly
3605	パッドアッセンブリ	PADDO ASSEMBURI	lining assembly of a disc brake		pad assembly
3606	アタッチメント	ATATTIMENTO	component of a brake lining assembly to which the brake lining is attached	<u>KYARIA</u>	attachment, carrier

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
3607	シュー	SYŪ	attachment in a shoe assembly		shoe
3608	バックプレート	BAKKU PURÊTO	attachment in a pad assembly		backplate
3609	ブレーキライニング	BURÊKI RAININGU	friction material component of a brake lining assembly		brake lining
3610	ライニングプロ フィール	RAININGU PUROHÎRU	circumscribed line on which brake lining attaches the drum or disc		lining profile
3611	レジンモールド	REZIN MÔRUDO	friction material thermoformed using thermosetting resin as the binder which serves as the material for the majority of current brake linings		resin mold
3612	NAO材	NAO ZAI	friction material containing heat resistance organic fibre or inorganic fibre in place of asbestos that uses phenol resin as the binder	NON ASUBESUTO ZAI	non-asbestos organic material
3613	ロースチール材	RÔSUTÎRU ZAI	friction material consisting of 10 % to 30 % steel components as reinforcement fibres		low steel materials
3614	メタル材	METARU ZAI	friction material consisting of 100 % metals (iron, copper)	SYÔKETU ZAI	metallic materials
3615	セミメタル材	SEMI METARU ZAI	friction material consisting of 30 % to 50 % steel components as reinforcement fibres		semi-metallic materials

4) Braking system components

4.1) Automatic control devices overall

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
4000	自動制御ブレーキ	ZIDÔ SEIGYO BURÊKI	braking system(s) or brake(s) which control brake or braking system automatically judging from the signal received from the sensor by controller		automatically commanded braking
4001	センサ	SENSA	component responsible for sensing the conditions of the dynamic state of the vehicle or actuation state of the component of the vehicle, and for transmitting this information to the controller		sensor
4002	コントローラ	KONTORÔRA	component responsible for evaluating the information supplied by a sensor or sensors and for transmitting control signals to the modulator		controller
4003	モジュレータ	MOZYURÊTA	component responsible for modulating the direct braking torque in response to control signals received from the controller	AKUTYUÊTA	modulator
4004	ブレーキングモジュレーション	BURÊKINGU MOZYURÊSYON	system control which reduces or increases the braking force automatically by sensing the vehicle state or the brake modulation of individual wheel and gear location when driver adjusts the braking force by brake pedal, etc.		braking modulation
4005	選択ブレーキ	SENTAKU BURÊKI	system which automatically alters individual braking force during deceleration for the purpose of the road vehicle attitude control		selective braking
4006	自動ブレーキ	ZIDÔ BURÊKI	braking system which automatically activated in order to reduce the road vehicle speed in such cases where there is a defect in the braking equipment		automatic braking

4.2) **ABS**

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
4100	ABS	Ê-BÎ-ESU	device which automatically modulates the pressure producing the braking forces at the wheels to limit the degree of wheel slip		ABS, anti-lock braking system
4101	各輪独立制御	KAKURIN DOKURITU SEIGYO	ABS control where the pressure producing the braking force at each wheel is individually modulated		individual wheel control
4102	複数輪制御	HUKUSÛRIN SEIGYO	ABS control where the pressure producing the braking force at a group of wheels is modulated by a common command		multi-wheel control
4103	アクスル制御	AKUSURU SEIGYO	multi-wheel control where all the wheels on a single axle are controlled by the common command		axle control
4104	サイド制御	SAIDO SEIGYO	multi-wheel control where the wheels only on one side of the vehicle are controlled by the common command		side control
4105	ダイアゴナル制御	DAIAGONARU SEIGYO	multi-wheel control where the wheels diagonally opposite each other on the road vehicle are controlled by the common command		diagonal control
4106	複数軸制御	HUKUSÛZIKU SEIGYO	multi-wheel control where all the wheels of a multi-axle combination are controlled by the common command		combined muti-axle control
4107	拡張形アクスル及び サイド制御	KAKUTYÔGATA AKUSURU OYOBI SAIDO SEIGYO	multi-wheel control, based on a combination of the modified axle and side controls, in which the common command is derived from sensor signals changed dynamically		modified axle/side control

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
4108	拡張形各輪独立制御	KAKUTYÔGATA KAKURIN DOKURITU SEIGYO	individual wheel control decided additionally by taking into account data from the opposite wheel NOTE: The objective is to reduce the lateral pull on the road vehicle by permitting only a gradual divergence of the braking forces on split-adhesion surfaces.		modified individual wheel control
4109	セレクトロー	SEREKUTO RÔ	multi-wheel control where the wheel with the lowest speed is selected to provide the signal from which the common command for the group is derived		select-low
4110	セレクトハイ	SEREKUTO HAI	multi-wheel control where the wheel with the highest speed is selected to provide the signal from which the common command for the group is derived		select-high
4111	車輪選択	SYARIN SENTAKU	multi-wheel control where the signal of a predetermined wheel controls the system for all the wheels of the group		selection by wheel
4112	平均選択	HEIKIN SENTAKU	multi-wheel control where the signal averaged the instantaneous speed of wheels controls all wheels of the group		average selection
4113	直接制御輪	TYOKUSETU SEIGYORIN	wheel whose braking force is modulated according to data provided by at least its own sensor		directly controlled wheel