CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B60 VEHICLES IN GENERAL

(NOTE omitted)

B60S SERVICING, CLEANING, REPAIRING, SUPPORTING, LIFTING, OR MANOEUVRING OF VEHICLES, NOT OTHERWISE PROVIDED FOR

NOTE

Attention is drawn to the Note following the title of class **B60**.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	Cleaning of vehicles (by apparatus not integral with	1/0444 {comprising vibration or noise absorbing
	vehicle <u>B60S 3/00</u> ; cleaning in general <u>B08B</u> ; de-	means}
	icing of aircraft <u>B64D</u> ; heating arrangements specially	1/0447 {non-screw fixation, (e.g. snap-in,
	adapted for transparent or reflecting areas <u>H05B 3/84</u>)	bayonnet-type)}
1/02	• Cleaning windscreens, windows or optical devices {(wind deflectors specially adapted for preventing soiling of windows or windscreens <u>B60J 1/2002</u>)}	1/045 {having a pre-attachment device (i.e. to hold elements in position during mounting)}
1/023	• • {including defroster or demisting means}	1/0452 {Position of the wipers relative to the vehicle}
1/026	• • · {using electrical means}	1/0455 {Device for lifting the wipers off the screen
1/04	Wipers or the like, e.g. scrapers	in its parking position or at extremes of
1/0402	• • • {completely or partially concealed in a cavity}	wipe}
1/0405	• • • {the cavity being equipped with a movable cover}	1/0458 {Arrangement wherein the windscreen frame cooperates with the wipers}
1/0408	• • • {Means for influencing the aerodynamic	1/0461 {Arrangement of the side pillars}
	quality of wipers, e.g. clip-on wind deflectors	1/0463 {Arrangement of the cowl}
	(B60S 1/32 takes precedence)}	1/0466 {Arrangement of wipers on openable
1/0411	• • • {the windscreens, windows or optical devices	windows}
	being movable with respect to fixed wipers}	1/0469 {Devices for assisting the wiper positioning
1/0413	{Modular wiper assembly}	on the vehicle}
1/0416	• • • {including other vehicle fittings}	1/0472 {Arrangement of the wipers on right or left-
1/0419	• • • { the support structure being integrally	hand drive vehicles}
	molded}	1/0475 • • • {Cleaning of wiper blades}
1/0422	• • • { having a separate transverse element }	1/0477 {Arrangement for deicing or for removing
1/0425	• • • • {characterised by the attachment of the wiper shaft holders to the transverse	debris from wiper blades (heated wiper blade <u>B60S 1/3805</u>)}
1/0427	element } {characterised by the attachment of the	1/048 { with a heating device for the wiper parking position}
	wiper motor holder to the transverse element}	1/0483 { the cleaning device being separate from the vehicle }
1/043	• • • {Attachment of the wiper assembly to the vehicle}	1/0486 { the cleaning device being integrated with the vehicle}
1/0433	• • • {Attachement of a wiper modular assembly to the vehicle}	1/0488 • • • {Wiper arrangement for crash protection or impact absorption}
1/0436	• • • • {Attachement of separate wiper shaft holders to the vehicle (B60S 1/0425 takes precedence)}	1/0491 {Additional elements being fixed on wipers or parts of wipers not otherwise provided for, e.g. covers, antennae or lights}
1/0438	{Attachement of separate wiper motor	1/0494 {Wipers actuated by wind force only}
	assembly to the vehicle}	1/0497 {Wiper units as items separate from vehicle,
1/0441	• • • {characterised by the attachment means}	e.g. for emergency use or retro-fittable}

1/06	1 4 11 41 11 7 1 1	1/14
1/06	characterised by the drive (producing other	1/14 personally driven
	than swinging movement <u>B60S 1/44</u>)	1/16 Means for transmitting drive
1/08	electrically driven {(conjoint control of windscreen wiper motor and liquid supply}	1/163 {with means for stopping or setting the wipers at their limit of movement}
	of windscreen washer <u>B60S 1/482</u> ; conjoint	1/166 {characterised by the combination of a
	control of windscreen wiper motor and	motor-reduction unit and a mechanism
	means for cleaning parts o parts other than	for converting rotary into oscillatory
	windscreens or front windows <u>B60S 1/56</u> ,	
	B60S 1/58, B60S 1/606)}	movement}
1/0803		1/18 mechanically {(<u>B60S 1/166</u> takes
	{Intermittent control circuits}	precedence)}
1/0807	{using electronic control means, e.g.	1/185 { with means for stopping or setting the
	tubes, semiconductors (<u>B60S 1/0818</u> ,	wipers at their limit of movement}
	B60S 1/0896 take precedence)}	1/20 by cable drives; by flexible shafts
1/0811	{combined with mechanical control	1/22 by rotary cams
	means, e.g. thermal relays}	1/24 by rotary cranks
1/0814	• • • • { using several drive motors; motor	1/245 { with particular rod arrangements
	synchronisation circuits}	between the motor driven axle and the
1/0818	• • • • {including control systems responsive to	wiper arm axle}
	external conditions, e.g. by detection of	1/26 by toothed gearing
	moisture, dirt or the like}	
1/0822	{characterized by the arrangement or	
	type of detection means}	(<u>B60S 1/06</u> takes precedence)
1/0825	{Capacitive rain sensor}	1/30 arranged both outside and inside
1/0829	{Oscillator-resonator rain sensor}	1/32 characterised by constructional features of
1/0823	{Oscinator-resonator rain sensor}	wiper blade arms {or blades}
	* *	1/34 Wiper arms; Mountings therefor {(wiper
1/0837	{with a particular arrangement of	arms provided with liquid spreading means
	the optical elements}	B60S 1/522; with gas spreading means
1/084	• • • • • • {including a hologram}	<u>B60S 1/544</u>)}
1/0844	• • • • • • {including a camera}	1/3402 {with means for obtaining particular
1/0848	(Cleaning devices for cameras on	wiping patterns (by varying the effective
	vehicle}	length of the angularly oscillating arm
1/0851	{Resistive rain sensor}	<u>B60S 1/365</u>)}
1/0855	{Ultrasonic rain sensor}	1/3404 {the wiper blades being moved
1/0859	{Other types of detection of rain, e.g.	substantially parallel with themselves}
	by measuring friction or rain drop	1/3406 {the wiper blades being rotated with
	impact}	respect to the wiper arms around an
1/0862	{including additional sensors (vehicle	axis perpendicular to the wiped field
	speed sensors <u>B60S 1/0896</u>)}	$(\underline{B60S} \ 1/3404 \text{ takes precedence})$
1/0866	{including a temperature sensor	1/3409 {the wiper arms consisting of two or
	(heating devices for windshield	more articulated elements}
	B60H)}	1/3411 { with means for varying wiper-blade
1/087	· · · · · · · {including an ambient light sensor	pressure on windshield during operation}
1,007	(control of vehicle lights <u>B60Q</u>)}	1/3413 { with means for holding the arm off the
1/0874	{characterized by the position of the	glass in an intermediate position between
1/00/4	sensor on the windshield}	the working position and the fully folded
1/0877	{at least part of the sensor being	back position}
1/00//	positioned between layers of the	1/3415 { with means for supplying cleaning fluid
		to windscreen cleaners, e.g. washers
1 (0001	windshield}	(arrangement of nozzles <u>B60S 1/52</u>)}
1/0881	{characterized by the attachment	
4 10000	means on the windshield}	` , , , , , , , , , , , , , , , , , , ,
1/0885	• • • • • • • (the sensor being integrated in a	wiper arm working position with respect to
	rear-view mirror module}	the surface to be wiped}
1/0888	• • • • • • {characterized by the attachment of	1/342 {with means for temporarily uncoupling
	the elements in a unit}	the wiper arm from the drive}
1/0892	{Testing and production of rain	1/3422 {Means arranged in the wiper structure
	sensors}	to lift the arm at extremes of wipe
1/0896	• • • • {including control systems responsive to a	(means arranged on the vehicle body
	vehicle driving condition, e.g. speed}	<u>B60S 1/0455</u>)}
1/10	pneumatically driven	1/3425 {Constructional aspects of the arm}
1/105	• • • • { with means for stopping or setting the	1/3427 {Arm piece, link piece and mounting
	wipers at their limit of movement}	head formed as one element}
1/12	hydraulically driven	1/3429 {Arm pieces}
1/125	• • • • { with means for stopping or setting the	1/3431 {Link pieces}
	wipers at their limit of movement}	1/3434 {Manufacturing details thereof}

1/3436	{Mounting heads}	1/381 {Spoilers mounted on the squeegee or
1/3438	{Manufacturing details thereof}	on the vertebra}
1/344	{Flat-type mounting heads}	2001/3812 {Means of supporting or holding the
1/3443	{Wiper shafts}	squeegee or blade rubber}
1/3445	{Virper sharts}	2001/3813 {chacterised by a support harness
1/3447	{the elements being an arm piece and	consisting of several articulated
1/344/	a link piece}	elements}
1/345	• • • • • { the elements being a link piece and a	2001/3815 (chacterised by the joint between
1,0.0	mounting head}	elements}
1/3452	• • • • • • • { the joint being a snap fit pivot	2001/3817 (chacterised by a backing strip to aid
	joint}	mounting of squeegee in support}
1/3454	{the joint being at end of mounting	2001/3818 {the backing strip being a channel-
	head furthest away from blade}	like element, e.g. not continuous}
1/3456	• • • • • • {Locks or stays for holding arms in	2001/382 {the backing strip being an essentiall
	fully folded back position}	planar reinforcing strip, e.g. vertebra
1/3459	• • • • • • { the element being a mounting head	2001/3822 {characterised by additional means to
	and a shaft}	prevent longitudinal sliding of squeeged in support, e.g. clips}
1/3461	• • • • • { with means to adjust the	2001/3824 {the blade or squeegee pivoting about a
	orientation of the head relative to	axis parallel to blade longitudinal axis}
1/2462	shaft}	2001/3825 {the squeegee mounted directly to or in
1/3463	• • • • {Means to press blade onto screen}	wiper blade arm}
1/3465	{with coil springs} {Mountings therefor}	2001/3827 {characterised by the squeegee or blade
1/3468	`	rubber or wiping element}
1/347	{ with adjustment means to adjust wiping pressure (during wiping	2001/3829 {characterised by the material of the
	B60S 1/3411)}	squeegee or coating thereof}
1/3472	• • • • • { with adjustment means to keep	2001/3831 (cleaning by scrubbing or abrasive
1/3//2	wiping pressure constant (varying	action}
	wiping pressure <u>B60S 1/3411</u>)}	2001/3832 (cleaning by rigid or semi-rigid
1/3475	• • • • { with blade or leaf springs }	scraping elements, e.g. for removing
1/3477	• • • • • { with elastomeric or rubber springs }	ice}
1/3479	{Means to cover the wiper parts}	2001/3834 {equipped with brush-like elements}
1/3481	{for mounting head}	2001/3836 {characterised by cross-sectional shape
1/3484	{integral with arm or link piece}	2001/3837 {with more than one wiping edge or
1/3486	{Means to allow blade to follow	lip}
	curvature of the screen (i.e. rotation along	2001/3839 { with longitudinally split squeegee with squeegee parts}
	longitudinal axis of the arm)}	2001/3841 {Squeegee modifications to prevent
1/3488	• • • • • { Means for mounting wiper arms onto the	longitudinally sliding of squeegee in
	vehicle}	support structure}
1/349	• • • • • {Means for mounting the wiper bearing	2001/3843 {equipped with removable cover or
1/2/02	to the vehicle body}	protective elements}
1/3493	(Means for mounting the wiper shaft in	2001/3844 {equipped with means to indicate wear or
1/3495	the wiper bearing}	usage of blade}
1/3493	{ Means for mounting the drive mechanism to the wiper shaft}	2001/3846 {Devices for renewing or renovating blade
1/3497	• • • • {Additional means for guiding the blade	wiping edges, e.g. cutters}
1/3477	other than the arm or blade joint}	1/3848 {Flat-type wiper blade, i.e. without
1/36	· · · · Variable-length arms	harness}
1/365	• • • • • { the effective length being automatically	1/3849 {Connectors therefor; Connection to
	varied during angular oscillation of the	wiper arm; Attached to blade}
	arm}	1/3851 (Mounting of connector to blade
1/38	• • • Wiper blades {(provided with liquid	assembly} 1/3853 {Snap-fit, e.g. elastic connection}
	spreading means <u>B60S 1/524</u> ; provided with	1/3853 {Snap-fit, e.g. elastic connection} 1/3855 {by welding, gluing or the like}
	gas spreading means $\underline{B60S 1/546}$)	1/3856 {Gripping the blade}
1/3801	{characterised by a blade support	1/3858 {With protrusions cooperating with
	harness consisting of several articulated	holes
	elements (<u>B60S 1/3803</u> , <u>B60S 1/3806</u> take	1/386 {made in two halves}
1/2902	precedence)}	1/3862 {Transport of liquid there through}
1/3803 1/3805	{heated wiper blades} {electrically}	1/3863 {Connectors having a spoiler}
1/3805	{Means, or measures taken, for	1/3865 {Connectors having an integral pivot
1/3000	influencing the aerodynamic quality of the	pin for connection with the wiper
	wiper blades}	arm}
1/3808	• • • • {Spoiler integral with the squeegee}	
2000	(Transit magnet man the squeegee)	

1/2067	(min formed on the interior of side	2001/4051 (the intermediate element engaging
1/3867	• • • • • • {pin formed on the interior of side walls}	2001/4051 {the intermediate element engaging the side walls of the arm}
1/3868	• • • • • {pin formed on the exterior of side walls}	2001/4054 {the intermediate element engaging the back part of the arm}
1/387	• • • • • • {the connector being suitable for receiving different types of adapter}	2001/4058 {comprising a separate locking element, e.g. in addition to an intermediate
1/3872	• • • • { without connector, e.g. connection to	element}
	wiper arm via squeegee or vertebra}	2001/4061 {covered by a removable cover mounted
1/3874	• • • • • { with a reinforcing vertebra}	on the blade}
1/3875	• • • • • {rectangular section}	1/4064 {the channel-shaped end being provided
1/3877	• • • • • • {embedded in the squeegee}	with protrusions on, or holes in, the side
1/3879	• • • • • • • {placed in side grooves in the	walls to create a pivot}
	squeegee}	1/4067 {for arms provided with a side pin}
1/3881	• • • • • • {in additional element, e.g. spoiler}	1/407 { with means provided on the arm for
1/3882	· · · · · · {C-shape section}	locking the side pin }
1/3884	• • • • • {Wire-shaped section}	1/4074 {with means provided on the blade for locking the side pin}
1/3886	• • • • {End caps}	1/4077 {characterised by the connecting part of,
1/3887	• • • • • • {Mounting of end caps}	or an intermediate element mounted on,
1/3889	• • • • • {cooperating with holes in the vertebra}	the wiper blade (means for locking the side pin B60S 1/4074)}
1/3891	• • • • • • { with locking device }	2001/408 {the connecting part or the
1/3893	• • • • • • {cooperating with holes in the	intermediate element being provided
	squeegee}	with holes for different diameters of
1/3894	• • • • • • {having a particular shape}	pivoting pin}
1/3896	• • • • • • { with openings at the longitudinal	1/4083 {for arms provided with a flat end}
	extremities}	1/4087 {the end being provided with
2001/3898	• • • • {method for manufacturing wiper blades}	protrusions or holes}
1/40	Connections between blades and arms	2001/409 {characterised by the arm or connecting
1/4003	• • • • • {Multi-purpose connections for two or	part mounted on the arm presenting a
1/4006	more kinds of arm ends}	shaped opening for bearing the pivot axis}
1/4006	• • • • { for arms provided with a hook-shaped	2001/4093 {characterised by the mounting of the
1/4000	end}	pivot on the main yoke of the blade}
1/4009	{comprising a detachable intermediate element mounted on the hook-shaped	2001/4096 {Connections between arm and blade not
	end }	using a cylindrical pivot axis on the blade}
2001/4012	{the element being provided with	1/42 resilient
2001/1012	bearing surfaces on its side walls}	1/44 the wiper blades having other than swinging
1/4016	{ the element being provided with	movement, e.g. rotary {(the wiper blade support member, e.g. arm, having a swinging
	retention means co-operating with the	
	hook-shaped end of the arm}	movement BbUS 1/3/11
1/4019		movement <u>B60S 1/32</u>)}
	{the retention means being	1/46 using liquid; Windscreen washers
		1/46 using liquid; Windscreen washers1/48 Liquid supply therefor
2001/4022	• • • • • { the retention means being	 1/46 using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid
2001/4022	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means
	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive 	 1/46 using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid
2001/4025	 { the retention means being protrusions or holes } { the element being provided with a locking element movable thereon } { the element being able to receive pivot pins of different diameters } 	 1/46 using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means
2001/4025	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)}
2001/4025 2001/4029	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} 	 1/46 . using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of
2001/4025 2001/4029	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers}
2001/4025 2001/4029 2001/4032	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to
2001/4025 2001/4029 2001/4032	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a 	 1/46 . using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of
2001/4025 2001/4029 2001/4032 2001/4035	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a removable cover mounted on the blade} 	 1/46 . using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like}
2001/4025 2001/4029 2001/4032	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a removable cover mounted on the blade} {for arms provided with a channel-shaped 	 1/46 . using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a
2001/4025 2001/4029 2001/4032 2001/4035 1/4038	 the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} for arms provided with a channel-shaped end} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed}
2001/4025 2001/4029 2001/4032 2001/4035	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a removable cover mounted on the blade} {for arms provided with a channel-shaped end} {the channel-shaped end comprising 	 1/46 . using liquid; Windscreen washers 1/48 Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided
2001/4025 2001/4029 2001/4032 2001/4035 1/4038	 the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} for arms provided with a channel-shaped end} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)}
2001/4025 2001/4029 2001/4032 2001/4035 1/4038	 the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} tfor arms provided with a channel-shaped end} the channel-shaped end comprising a pivot pin mounted between the side walls} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically}
2001/4025 2001/4029 2001/4032 2001/4035 1/4038 1/4041	 the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} for arms provided with a channel-shaped end} the channel-shaped end comprising a pivot pin mounted between the side walls} 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically} 1/50 Arrangement of reservoir
2001/4025 2001/4029 2001/4032 2001/4035 1/4038 1/4041	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a removable cover mounted on the blade} {for arms provided with a channel-shaped end} {the channel-shaped end comprising a pivot pin mounted between the side walls} {comprising a detachable intermediate 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically} 1/50 Arrangement of reservoir 1/52 Arrangement of nozzles; {Liquid spreading
2001/4025 2001/4029 2001/4032 2001/4035 1/4038 1/4041	the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} the connection being covered by a removable cover mounted on the blade} the channel-shaped end comprising a pivot pin mounted between the side walls} the channel-shaped end comprising a pivot pin mounted on the channel-shaped end} the element being provided with	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically} 1/50 Arrangement of reservoir 1/52 Arrangement of nozzles; {Liquid spreading means}(nozzles per se B05B)
2001/4025 2001/4029 2001/4032 2001/4035 1/4038 1/4041 1/4045	 {the retention means being protrusions or holes} {the element being provided with a locking element movable thereon} {the element being able to receive pivot pins of different diameters} {the element being able to receive arms of different widths} {the element being able to receive arms with hooks of different radiuses} {the connection being covered by a removable cover mounted on the blade} {for arms provided with a channel-shaped end} {the channel-shaped end comprising a pivot pin mounted between the side walls} {comprising a detachable intermediate element mounted on the channel-shaped end} {the element being provided with retention means co-operating with the 	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically} 1/50 Arrangement of reservoir 1/52 Arrangement of nozzles; {Liquid spreading means} (nozzles per se B05B) 1/522 {moving liquid spreading means, e.g.
2001/4025 2001/4029 2001/4032 2001/4035 1/4038 1/4041 1/4045	the retention means being protrusions or holes} the element being provided with a locking element movable thereon} the element being able to receive pivot pins of different diameters} the element being able to receive arms of different widths} the element being able to receive arms with hooks of different radiuses} the connection being covered by a removable cover mounted on the blade} the connection being covered by a removable cover mounted on the blade} the channel-shaped end comprising a pivot pin mounted between the side walls} the channel-shaped end comprising a pivot pin mounted on the channel-shaped end} the element being provided with	 1/46 . using liquid; Windscreen washers 1/48 . Liquid supply therefor 1/481 {the operation of at least part of the liquid supply being controlled by electric means (electrical washing liquid warming-up means B60S 1/488)} 1/482 {combined with the operation of windscreen wipers} 1/483 {using a supply pump driven by the windscreen-wiper motor} 1/485 {including control systems responsive to external conditions, e.g. by detection of moisture, dirt or the like} 1/486 {including control systems responsive to a vehicle driving condition, e.g. speed} 1/487 {the liquid being heated (nozzles provided with heating means B60S 1/52)} 1/488 {electrically} 1/50 Arrangement of reservoir 1/52 Arrangement of nozzles; {Liquid spreading means}(nozzles per se B05B)

1/526	{according to vehicle movement characteristics, e.g. speed, or climatic	3/048	• • { with rotary or vibratory bodies contacting the vehicle}
1/528	conditions, e.g. wind} { the spreading means being moved	3/06	 with rotary bodies contacting the vehicle {(hand- held <u>B60S 3/048)</u>}
	between a rest position and a working position (B60S 1/526 takes	3/063	• • { the axis of rotation being approximately vertical }
1/54	precedence)}using gas, e.g. hot air	3/066	• • { the axis of rotation being approximately horizontal }
1/542	• • • {using wiping devices}		nonzonarj
1/544	{moving gas spreading means, e.g. arranged in wiper arms}	5/00	Servicing, maintaining, repairing, or refitting of vehicles (vehicles adapted to carry a workshop for servicing or maintenance <u>B60P 3/14</u> ; servicing rail
1/546	• • • {arranged in wiper blades}		
1/548	{according to vehicle movement		locomotives <u>B61K</u>)
1/56	characteristics, e.g. speed, or climatic conditions, e.g. wind} . specially adapted for cleaning other parts or	5/02	 Supplying fuel to vehicles; General disposition of plant in filling stations (apparatus for transferring measured quantities of petrol, oil, or the like from
1/30	devices than front windows or windscreens		storage space to vehicles <u>B67D</u>)
	{(rear-view mirror arrangements mounted on vehicle exterior including cleaning devices B60R 1/0602)}	5/04	• Supplying air for tyre inflation (arrangement of tyre inflating devices on vehicles <u>B60C 23/00</u> ; tyre pressure gauges <u>G01L 17/00</u> {; pumps actuated by muscle power <u>F04B 33/00</u> })
1/563	• • • {for registration, licensing or like devices}	5/042	
1/566	• • • {including wiping devices (<u>B60S 1/563</u> , <u>B60S 1/583</u> take precedence)}	5/043	• • {characterised by the inflation control means or the drive of the air pressure system}
1/58	• • • for rear windows	5/046	• • • {using electrical or electronical means}
1/583	{including wiping devices}	5/06	 Supplying batteries to, or removing batteries
1/586	{including wiping devices} {including defroster or demisting means}		from, vehicles (exchanging batteries for electric
1/60	• • • for signalling devices, e.g. reflectors		propulsion of vehicles <u>B60L 53/80</u>)
1/603	• • • • • • • • • • • • • • • • • • •	9/00	Ground-engaging vehicle fittings for supporting,
1/003	cleaning means being controlled by electric means}	.,	lifting, or manoeuvring the vehicle, wholly or in part, e.g. built-in jacks (lifting devices in general
1/606	• • • • {combined with the operation of	0.40.0	B66F; supports in general F16M)
	windscreen or front window cleaning	9/02	• for only lifting or supporting
	means}	9/04	mechanically
1/62	 Other vehicle fittings for cleaning 	9/06	of screw-and-nut type
1/64	• • for cleaning vehicle interiors, e.g. built-in vacuum	9/08	the screw axis being substantially vertical
	cleaners	9/10	• • by fluid pressure
1/66	 for cleaning vehicle exterior 	9/12	of telescopic type
1/68	• • • for freeing wheels or tyres from foreign matter,	9/14	 for both lifting and manoeuvring
1/685	e.g. wheel scrapers	9/16	• • for operating only on one end of vehicle
1/003	• • • • {for two-wheeled vehicles}	0/19	(B60S 9/205 takes precedence)
3/00	Vehicle cleaning apparatus not integral with	9/18	mechanically
	vehicles (cleaning in general B08B; cleaning peculiar	9/20	with fluid-pressure lift
	to waterborne vessels <u>B63B 57/00</u> , <u>B63B 59/00</u> ;	9/205	. Power driven manoeuvring fittings, e.g.
	ground equipment for cleaning aircraft B64F 5/30)		reciprocably driven steppers or rotatably driven
3/002	• {Vehicle drying apparatus}		cams (vehicles with ground-engaging propulsion
3/004	• {Conveyors for vehicle cleaning apparatus}	0/21	means, e.g. walking members, <u>B62D 57/02</u>)
3/006	• {specially adapted for railway vehicles (<u>B60S 3/008</u> takes precedence)}	9/21	 comprising a rotatably driven auxiliary wheel or endless track, e.g. driven by ground wheel (track vehicles with additional or
3/008	• {for interiors of land vehicles}		alternative ground wheels <u>B62D 55/02</u> ,
3/04	• for exteriors of land vehicles {(B60S 3/002,		B62D 55/04; auxiliary drives from a ground
	<u>B60S 3/004</u> take precedence; specially adapted for railway vehicles <u>B60S 3/006</u>)}	9/215	wheel <u>B60K 25/08</u>) driven by an auxiliary motor
3/041	• • {specially adapted for two-wheeled vehicles}	9/213	Means for attaching lifting, supporting, or
3/042	• • {Wheel cleaning devices (integral with vehicle	9/22	manoeuvring devices to vehicles (for separate
	<u>B60S 1/00</u>)}		devices B60S 11/00)
3/044	 {Hand-held cleaning arrangements with liquid or gas distributing means (B60S 3/045 takes precedence)} 	11/00	Vehicle modifications for receiving separate lifting, supporting, or manoeuvring devices
3/045	• • {Other hand-held cleaning arrangements, e.g.	13/00	Vehicle-manoeuvring devices separate from the
	with sponges, brushes, scrapers or the like (brushes per se A46B)}	13/00	vehicle (vehicle lifting {, e.g. liftable turntables} or pushing devices <u>B66F</u> ; {workshop equipment <u>B25H</u> })
3/047	• • • {using liquid or gas distributing means		pushing devices <u>boor</u> , {workshop equipment <u>b25H</u> })
	(<u>B60S 3/048</u> takes precedence)}		

B60S

13/02

. Turntables; Traversers (incorporated in vehicle-storing garages $\underline{E04H}$ {; rotary display stands $\underline{A47F}$ 5/02})