

Search query (20): [SP]: cross reference to related applications[0001] this application claims priority under 35 usc 119 of french patent application no. 15 54024 filed on may 5, 2015.field of the invention[0002] the present invention relates to a device for protecting a bucket edge, and a protection system comprising such a device. the present invention also relates to a method of protecting a bucket edge with the aid of such a protection system.[0003] the field of application of the invention is that of public works or mine extraction machines, in particular buckets, scoops or other receptacles equipping such machines, or, more generally, any other receptacle designed to scrape, remove and/or move materials from one given location to other operating stations. in the context of public works, such machines may be in the form of, for example, a backhoe, an excavator, a backhoe loader, or any construction machine of the same type. in the context of mining extraction, this type of machine may be for example a loader, an lhd ("load-haul-dumpster") or any other machine of the same type.background of the invention[0004] in a known manner, a bucket forms a form of tray with an access opening which is generally rectangular in shape. the edges defining the opening generally form a cutting blade, an upper blade and two lateral wings. the edges in question, and, in particular, the cutting blade, generally need to be protected by wear parts that are removably mounted to cover the edges in question. these known wear parts form for example bucket teeth, or shields. to facilitate and guide the attachment of these wear parts to the bucket, the bucket is generally equipped with adapter brackets that are welded or screwed to the bucket, wherein the wear parts are designed to be mounted on the adapter brackets.[0005] wo 2005/098149 proposes a wear assembly for an excavation bucket. in this case, the wear part is designed to be slipped on an adapter bracket that is integral with the bucket. the wear part has an opening, which, when the wear part is assembled on the adapter bracket, opens onto a hollow form of the adapter bracket. the assembly also includes a fastening means formed by a body received in the opening of the wear part, enabling it to be housed in the opening of the adapter bracket and thus to secure the wear part to the adapter bracket.[0006] in order to maintain the fastening means in the opening of the wear part, the fastening means in question are provided with a threaded hole which may receive a threaded rod. the end of the latter may be brought into close contact with a receiving surface of the opening of the wear part by screwing. thus, the fastening means is fixed in the opening by jamming them through the tightening pressure of the screw.[0007] nevertheless, this type of assembly has certain limits. in the first place, the reliability of the jamming of the fastening means depends on the clamping force applied to the threaded rod, so that insufficient force may call into question the reliability of the assembly. secondly, the rotation of the threaded rod requires several turns in order to perform a satisfactory tightening, which may constitute a substantial loss of time for the operator, especially in the case where many wear parts must be attached to the bucket. in addition, under the effect of vibration and abrasion caused by the materials carried in the bucket, there is a risk of loosening of the threaded rod and thus accidental disassembly of the fastening means, which is likely to cause detachment of the wear part concerned. conversely, it may sometimes be difficult for an operator to disassemble a worn wear part, in the case where the threaded rod is particularly tight or jammed by materials accumulated during use of the bucket.summary of the description[0008] accordingly, the object of the invention is to remedy the various disadvantages mentioned above and to propose a new device for protecting a bucket edge whose mounting on the bucket is reliable, easy and fast.[0009] for this purpose, an object of the invention is a device for protecting an edge of a bucket of a public works machine or an extraction machine, wherein the bucket comprises a rail to receive the protection device, wherein a retaining slot for the protection device is provided in the rail.[0010] the protection device according to the invention comprises an edge protection part, which is designed to be slipped on the sliding rail along a sliding axis to form an edge protection configuration, wherein a window is provided through the protective part so that the window opens into the retaining slot in the protection configuration. the protection device according to the invention also comprises a shim which is designed to be mounted within the window in order to be housed in the retaining slot in the protection configuration in order to block the sliding of the protective part relative to the rail and thus to secure the latter to each other. according to the invention, the protection device comprises at least one locking stop arranged at the periphery of the window, wherein the protection device comprises a locking key that is movable relative to the shim about a pivot axis between a first angular position, in which it allows the assembly and disassembly of the shim in the window and a second angular position, in which the key abuts the locking stop and thus prevents disassembly of the shim.[0011] by virtue of the invention, a locking stop is provided within the window against which the rotary key bears when in a suitable orientation. in this configuration, any risk of accidental extraction of the shim from the window is thus prevented. the abutment of these two elements against each other advantageously ensures the locking of the shim in the housing that is formed by the window and the retaining slot, without the need for clamping. on the other hand, when the key is in another orientation, it does not abut the locking stop and therefore no longer opposes the assembly or disassembly of the shim. thus, by virtue of the invention, rotation of the key through an angle less than a full turn allows a user to effect locking or unlocking of the shim in its housing, so that the assembly and disassembly of the protection device on the rail are easy, fast and reliable.[0012] according to other advantageous features of the invention, taken separately or in combination: the key comprises a head projecting from the shim and in a portion of which is hollowed out a passage slot, while the remaining portion of the head forms an abutment finger, wherein the protection part comprises a notch to receive the head of the key when the shim is mounted within the window, while the receiving notch extends from an entrance neck where the section of the notch is reduced to form the locking stop, so that: a when the key is in its first angular position, the abutment finger is oriented to traverse the entrance neck during assembly or disassembly of the shim and that when the key is in its second angular position, the abutment finger abuts the entrance neck, which thus opposes the disassembly of the shim.the key comprises a lug which extends radially relative to the pivot axis outside the shim, wherein the protection part comprises a radial stop which forms the locking stop, wherein the radial stop is arranged in the protection part in order to extend radially with respect to the key when the shim is mounted, so that: when the key is in the first angular position, the lug is spaced from the radial stop so that the shim may be freely disassembled, and that when the key is in the second angular position, the lug abuts the radial stop and thus opposes the disassembly of the shim.the radial stop forms a latching notch of the lug, so that, when the shim is mounted, pivoting of the key to the second angular position allows the lug to engage in the latching notch, while pivoting the key to the first angular position releases the lug from the latching notch.the shim comprises a travel start abutment against which the lug abuts when the key is in its first angular position to limit the angular travel of the key to the first angular position.the key comprises a substantially cylindrical clamping cam defining a cam axis which is parallel to the pivot axis but not coaxial with the latter, so that pivoting of the key from the first angular position to the second angular position causes eccentric displacement of the cam about the pivot axis, wherein the protection part comprises a bearing surface which extends in a plane substantially orthogonal to the sliding axis, so that: when the key is in its first angular position, the cam is spaced from the support surface and that when the key is in its second angular position and when the shim is mounted, the cam bears against the bearing surface, and the shim is accordingly pressed against the retaining slot in the direction of the sliding axis.the key comprises a longitudinal body and a sheath made of a softer material than the longitudinal body, in which the longitudinal body is inserted integrally in rotation, wherein the shim comprises a bore that is coaxial with the pivot axis and within which the longitudinal body and its sheath may be inserted to form a pivot connection about the pivot axis for the key relative to the shim, and wherein the sheath and the bore are adjusted to oppose the pivoting of the key relative to the shim around the pivot axis.the sheath and the bore have a substantially cylindrical complementary shape, preferably with a polygonal base, which is coaxial with the pivot axis in order to oppose the pivoting of the key relative to the shim about the pivot axis.the sheath

Results: 6

Search history

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Search PN=(WO2015123458) (Results 1)

2:

Search PD<20141115 (Results 1000000)

3:

Search PD<20141115 and CPC=(H04W84) (Results 28769)

4:

5: [SP]: A device for protecting the edge of a spoon of a public work machine or an extraction machine, wherein the ladle comprises a rail for receiving the protection device, and a retaining notch provided in the rail, wherein the device Protection includes: an edge protection part, which is designed to slide on the sliding rail, which slides along a sliding axis, to an edge protection configuration, wherein a window is arranged across the part of protection so that the window opens in the retention slot, in the protection configuration, (Results 0)

6: [SP]: A device for protecting the edge of a spoon of a public work machine or an extraction machine, wherein the ladle comprises a rail for receiving the protection device, and a retaining notch provided in the rail, wherein the device Protection includes: - an edge protection part, which is designed to slide on the sliding rail, which slides along a sliding axis, to an edge protection configuration, wherein a window is arranged across the part of protection so that the window opens in the retention slot, in the protection configuration, (Results 0)

Search [CN]: TAC=(发动机) (Results 227519)

7:

Search PN=(CN1564925) (Results 1)

8:

Search PN=(WO2014112478) (Results 1)

9:

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10:

Search FT=(device* and protect* and spool* and extract* and machine* and edge*) and PD<20150505 (Results 2304)

11:

Search 11 and slid* and rail* (Results 671)

12:

Search 12 and wedge* and retention* (Results 39)

13:

Search 12 and IC=(E02F) or CPC=(E02F) (Results 3)

14:

Search 11 and IC=(E02F) or CPC=(E02F) (Results 13)

15:

Search [SP]: ultrasonic inspection device and ultrasonic inspection method an ultrasonic inspection device includes a signal generator configured to generate a square wave burst signal, an ultrasonic wave transmitter configured to drive a probe according to the square wave burst signal output from the signal generator and transmit ultrasonic waves toward an inspection subject, an ultrasonic wave receiver configured to receive the ultrasonic waves transmitted toward the inspection subject and propagated through the inspection subject, and a defect determinator configured to determine the presence or absence of a defect in the inspection subject based on a signal from the ultrasonic wave receiver, wherein the square wave burst signal has square waves that continuously alternate due to positive voltages and negative voltages relative to a ground. (Results 6)

Search PN=(WO2016177807) and PD<20150505 (Results 0)

17:

Search PN=(WO2016177807) (Results 1)

18:

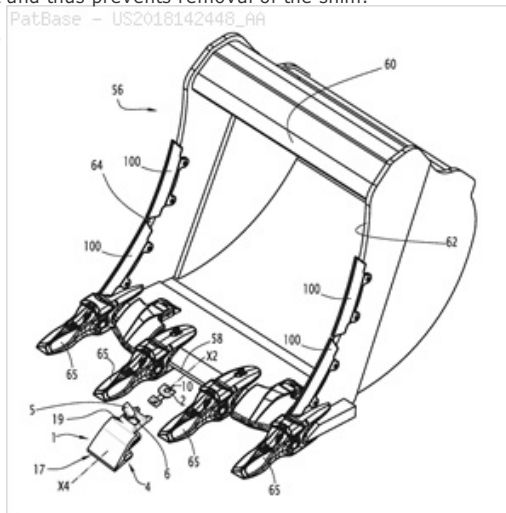
Search [SP]: device, system and method for protecting an edge of a bucket a device for protecting an edge of a bucket including a rail having a retaining notch, the device including a protective part which is designed so as to be slipped onto the rail and which includes at least one locking abutment, the device also including a shim which is designed to be mounted on the protective part so as to be inserted into the retaining notch in order to block the sliding of the protective part, the device including a locking key which is movable relative to the shim, between a first angular position, in which it allows installation and removal of the shim in the window, and a second angular position, in which the key abuts against the locking abutment and thus prevents removal of the shim. (Results 6)

Search [SP]: cross reference to related applications[0001] this application claims priority under 35 usc 119 of french patent application no. 15 54024 filed on may 5, 2015.field of the invention[0002] the present invention relates to a device for protecting a bucket edge, and a protection system comprising such a device. the present invention also relates to a method of protecting a bucket edge with the aid of such a protection system.[0003] the field of application of the invention is that of public works or mine extraction machines, in particular buckets, scoops or other receptacles equipping such machines, or, more generally, any other receptacle designed to scrape, remove and/or move materials from one given location to other operating stations. in the context of public works, such machines may be in the form of, for example, a backhoe, an excavator, a backhoe loader, or any construction machine of the same type. in the context of mining extraction, this type of machine may be for example a loader, an lhd ("load-haul-dumpster") or any other machine of the same type.background of the invention[0004] in a known manner, a bucket forms a form of tray with an access opening which is generally rectangular in shape. the edges defining the opening generally form a cutting blade, an upper blade and two lateral wings. the edges in question, and, in particular, the cutting blade, generally need to be protected by wear parts that are removably mounted to cover the edges in question. these known wear parts form for example bucket teeth, or shields. to facilitate and guide the attachment of these wear parts to the bucket, the bucket is generally equipped with adapter brackets that are welded or screwed to the bucket, wherein the wear parts are designed to be mounted on the adapter brackets.[0005] wo 2005/098149 proposes a wear assembly for an excavation bucket. in this case, the wear part is designed to be slipped on an adapter bracket that is integral with the bucket. the wear part has an opening, which, when the wear part is assembled on the adapter bracket, opens onto a hollow form of the adapter bracket. the assembly also includes a fastening means formed by a body received in the opening of the wear part, enabling it to be housed in the opening of the adapter bracket and thus to secure the wear part to the adapter bracket.[0006] in order to maintain the fastening means in the opening of the wear part, the fastening means in question are provided with a threaded hole which may receive a threaded rod. the end of the latter may be brought into close contact with a receiving surface of the opening of the wear part by screwing. thus, the fastening means is fixed in the opening by jamming them through the tightening pressure of the screw.[0007] nevertheless, this type of assembly has certain limits. in the first place, the reliability of the jamming of the fastening means depends on the clamping force applied to the threaded rod, so that insufficient force may call into question the reliability of the assembly. secondly, the rotation of the threaded rod requires several turns in order to perform a satisfactory tightening, which may constitute a substantial loss of time for the operator, especially in the case where many wear parts must be attached to the bucket. in addition, under the effect of vibration and abrasion caused by the materials carried in the bucket, there is a risk of loosening of the threaded rod and thus accidental disassembly of the fastening means, which is likely to cause detachment of the wear part concerned. conversely, it may sometimes be difficult for an operator to disassemble a worn wear part, in the case where the threaded rod is particularly tight or jammed by materials accumulated during use of the bucket.summary of the description[0008] accordingly, the object of the invention is to remedy the various disadvantages mentioned above and to propose a new device for protecting a bucket edge whose mounting 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according to the invention, the protection device comprises at least one locking stop arranged at the periphery of the window, wherein the protection device comprises a locking key that is movable relative to the shim about a pivot axis between a first angular position, in which it allows the assembly and disassembly of the shim in the window and a second angular position, in which the key abuts the locking stop and thus prevents disassembly of the shim.[0011] by virtue of the invention, a locking stop is provided within the window against which the rotary key bears when in a suitable orientation. in this configuration, any risk of accidental extraction of the shim from the window is thus prevented. the abutment of these two elements against each other advantageously ensures the locking of the shim in the housing that is formed by the window and the retaining slot, without the need for clamping. on the other hand, when the key is in another orientation, it does not abut the locking stop and therefore no longer opposes the assembly or disassembly of the shim. thus, by virtue of the invention, rotation of the key through an angle less than a full turn allows a user to effect locking or unlocking of the shim in its housing, so that the assembly and disassembly of the protection device on the rail are easy, fast and reliable.[0012] according to other advantageous features of the invention, taken separately or in combination: the key comprises a head projecting from the shim and in a portion of which is hollowed out a passage slot, while the remaining portion of the head forms an abutment finger, wherein the protection part comprises a notch to receive the head of the key when the shim is mounted within the window, while the receiving notch extends from an entrance neck where the section of the notch is reduced to form the locking stop, so that: a when the key is in its first angular position, the abutment finger is oriented to traverse the entrance neck during 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comprises a longitudinal body and a sheath made of a softer material than the longitudinal body, in which the longitudinal body is inserted integrally in rotation, wherein the shim comprises a bore that is coaxial with the pivot axis and within which the longitudinal body and its sheath may be inserted to form a pivot connection about the pivot axis for the key relative to the shim, and wherein the sheath and the bore are adjusted to oppose the pivoting of the key relative to the shim around the pivot axis.the sheath and the bore have a substantially cylindrical complementary shape, preferably with a polygonal base, which is coaxial with the pivot axis in order to oppose the pivoting of the key relative to the shim about the pivot axis.the sheat (Results 6)

Abstract: A device for protecting an edge of a bucket including a rail having a retaining notch, the device including a protective part which is designed so as to be slipped onto the rail and which includes at least one locking abutment, the device also including a shim which is designed to be mounted on the protective part so as to be inserted into the retaining notch in order to block the sliding of the protective part, the device including a locking key which is movable relative to the shim, between a first angular position, in which it allows installation and removal of the shim in the window, and a second angular position, in which the key abuts against the locking abutment and thus prevents removal of the shim.

PatBase - US2018142448 A4

CPC: E02F3/40 E02F9/2883



Publication number	Publication date	Application number	Application date
AU2016259056 A	20171130	AU20160259056	20160504
BR112017023875 A2	20180731	BR20171123875	20160504
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WO16177807 A1	20161110	WO2016EP60051	20160504
ZA201707479 A	20181031	ZA20170007479	20171103

FR20150054024 20150505 WO2016EP60051 20160504

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Assignee(s): MARCHAND FABRICE

Inventor(s): (std): FABRICE MARCHAND : MARCHAND FABRICE

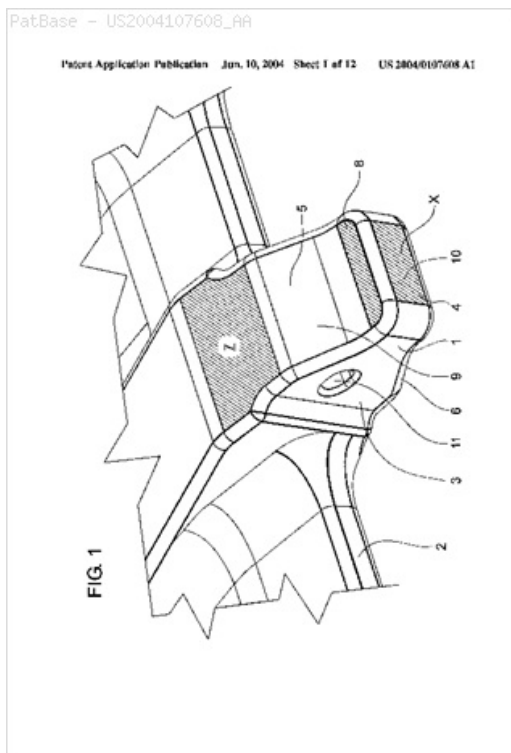
Agent(s): DAVIES COLLISON CAVE PTY LTD; ROBIC; MARINO PORZIO; JUAN PABLO CADENA SARMIENTO; LAVOIX; HK PAT IP LTD; IRYT WIDJOJO; AOKI ATSUSHI; MYON GERARD ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UB US UZ VC VN ZA ZW ZW

Abstract: Abstract of the Disclosure An excavator tooth system comprises a mounting nose having a projecting spigot and a wear member (12) having at one end a socket (18), the socket (18) being defined by spaced side walls and upper and lower walls converging from a rearwardly facing socket opening to a forward end of the socket. Each of the upper and lower walls comprises a forward bearing face (8a) and a rear bearing face (7a) separated by a forwardly convergent intermediate face. The front and rear bearing faces (8a,7a) are substantially parallel to a longitudinal axis (50) of the wear member and engage corresponding bearing faces (8,7) in said spigot.

International (IPC 8-9): E02F9/28 (Advanced/Invention);

E02F9/28 (Core/Invention)
International (IPC 1-7): E02F9/28
CPC: E02F9/2825 E02F9/2833 E02F9/2883
European: E02F9/28A2B E02F9/28A2C E02F9/28F
US: 37/452 37/452P 37/455 37/455P



Family:

Publication number	Publication date	Application number	Application date
AU2002953089 A0	20021219	AU20020953089	20021204
AU2003264586 AA	20040701	AU20030264586	20031128
AU2003264586 BB	20090326	AU20030264586	20031128
AU2003901793 A0	20030501	AU20030901793	20030415
US2004107608 AA	20040610	US20030707290	20031203
US2007051022 AA	20070308	US20060461790	20060802

Priority:

AU20020953089 20021204 AU20030901793 20030415 AU20030264586 20031128
 US20030707290 20031203 US20060461790 20060802

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Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; BUCKINGHAM DOOLITTLE AND BURROUGHS LLP

3) Family number: 32311333 (US2005229442A)

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Title: WEAR EDGE ASSEMBLY

Abstract: A wear assembly for protecting a structure, such as an excavating bucket, from wear includes a lock for securing the wear member in place. The lock includes a take-up element for tightening the fit of the wear member, a latch to retain the lock in the assembly during use, and an arrangement for resisting loosening of the lock. With the assembly, the lock is able to effectively tighten the fit of the wear member on the lip, resist loosening of the fit, and facilitate easy removal of the lock without a concomitant increased risk of lock ejection.

Classifications:

International (IPC 8-9): E02F E02F9/00

E02F9/28 (Advanced/Invention);

E02F9/00 E02F9/28 (Advanced/Non-invention);

E02F9/00 E02F9/28 (Core/Invention);

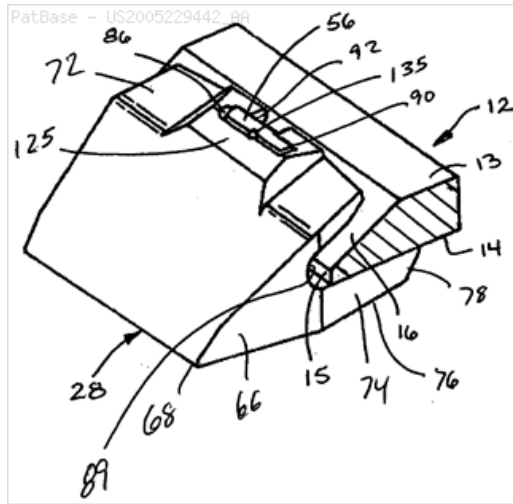
E02F (Subclass/Invention)

International (IPC 1-7): E02F9/28

CPC: E02F9/2825 E02F9/2841 E02F9/2883 E02F9/2833

European: E02F9/28 E02F9/28A2B E02F9/28A2C E02F9/28A2C2
 E02F9/28F

US: 37/452 37/452P 37/453 37/455 37/456



Family:

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US20040812348 20040330 WO2005US09840 20050323 US20060529447 20060928
US20070799094 20070430

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Agent(s): MINTER ELLISON; MALLESONS STEPHEN JAKUES; KING AND WOOD MALLESONS; FINLAYSON AND SINGLEHURST; PORZIO; LIU SHEN AND ASSOCIATES; CHIBA AKIO; ONO SHINJIRO; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; MIYAMAE TORU; BANNER AND WITCOFF; ESCO CORP; STEVEN P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Abstract: A mechanical system (1) includes a support (10), a tooth (20) and a device (30) for interconnecting the two components. The device includes an elastic sheath (40) having an inner cavity (48) and an outer wall (44) adjustable in a housing (14) of the support, and a key (50) adjustable in the cavity. The sheath and the key can be rotated together in a fixed manner about a pivoting axis in the housing, between an insertion configuration and a locking configuration, thereby forming a coupling connection between the tooth and the support. The inner cavity extends into the sheath along an eccentric axis that is radically staggered in relation to the pivoting axis. The inner cavity is provided with elements for rotatably securing to driving elements (59) arranged on the key. A heavy-construction machine bucket including such a system, and a method for implementing such a system are also described.

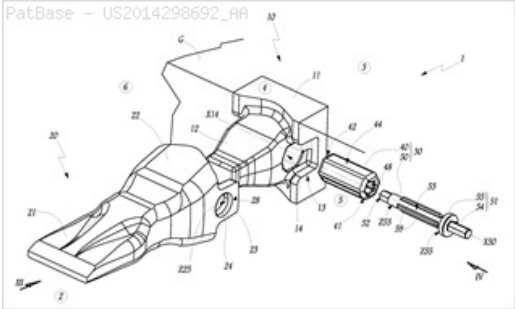
Classifications:

International (IPC 8-9): E02F3/28 E02F9/28

F16B3/00 (Advanced/Invention)

CPC: E02F9/2833 E02F9/2825 E02F9/2841 Y10T29/4995

US: 1/1 29/525.03 37/444 37/456



Family:

Publication number	Publication date	Application number	Application date
AU2012300802 AA	20130307	AU20120300802	20120831
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WO13030335 A1	20130307	WO2012EP66960	20120831

Priority:

FR20110057732 20110901 WO2012EP66960 20120831

Probable Assignee: SAFE METAL

Assignee(s): (std): AFE METAL ; MARCHAND FABRICE ; SAFE METAL

Inventor(s): (std): FABRICE MARCHAND ; MARCHAND FABRICE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; ROBIC; MYON GERARD JEAN PIERRE; CABINET LAVOIX LYON; YOUNG AND THOMPSON; MYON GERARD ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

5) Family number: 58799571 (US2016319520A)

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Title: MECHANICAL SYSTEM COMPRISING A CONNECTING DEVICE BETWEEN A WEARING PART AND THE SUPPORT THEREOF, AND BUCKET OF A HEAVY CONSTRUCTION MACHINE

Abstract: The present invention relates to a mechanical system (1), comprising a support (10), a wearing part (20) and a connecting device (30) between the wearing part (20) and the support thereof (10). The device (30) comprises an elastic sheath (40) provided with an internal cavity (47) and with an external wall (44) that is adjustable in a housing (14) of the support (10), and a pin (50) having an elongate body along a pin axis (X50). According to the invention, the device (30) also comprises a cam (60) provided with an external wall (63) that is adjustable in the internal cavity (47) of the sheath (40) and with an internal cavity (64) intended to receive the pin (50), and when the device (30) is positioned in the housing (14) of the support (10), the pin (50) and the cam (60) are able to rotate as one in the internal cavity (47) of the sheath (40), between an insertion configuration (A) of the pin (50) into the cam (60) and at least one locking configuration in which the pin (50) bears, radially with respect to the pin axis (X50), against the wearing part (20), while the cam (60) bears against the sheath (40) and deforms the external wall (44) thereof counter to the housing (14) of the support (10), thereby forming a coupling connection between the wearing part (20) and the support (10).

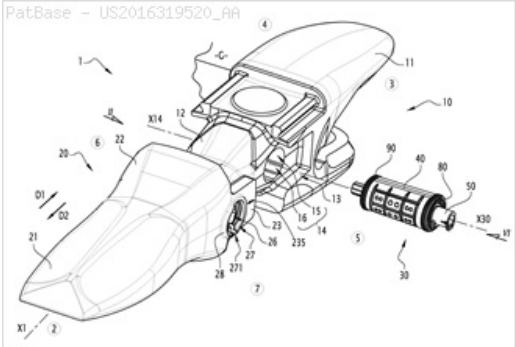
Classifications:

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E02F9/2825 E02F9/2833 E02F9/2858 E02F9/2808

US: 37/457



Family:

Publication number	Publication date	Application number	Application date
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ZA201601772 A	20180228	ZA20160001772	20160315

Priority:

FR20130059079 20130920 EP20140766999 20140918 WO2014EP69869 20140918

Probable Assignee: SAFE METAL

Assignee(s): (std): SAFE METAL ; SEJF METAL

Assignee(s): MARCHAND FABRICE

Inventor(s): (std): FABRICE MARCHAND ; MARCHAND FABRICE ; MARSHAN FABRIS

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; ROBIC; PORZIO RIOS AND ASOCIADOS; JUAN PABLO CADENA SARMIENTO; LAVOIX MUNICH; MYON GERARD JEAN PIERRE; LAVOIX; SALVA JOAN; CABINET LAVOIX LYON; DORA AM BADAR SPISI; SOYUZPATENT OOO; EBRU GUERMESBAS; KNOBBE MARTENS OLSON AND BEAR LLP; MYON GERARD ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

6) Family number: 72260937 (WO18222195A1)

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Title: CONSTRUCTION VEHICLE BUCKET ATTACHMENT

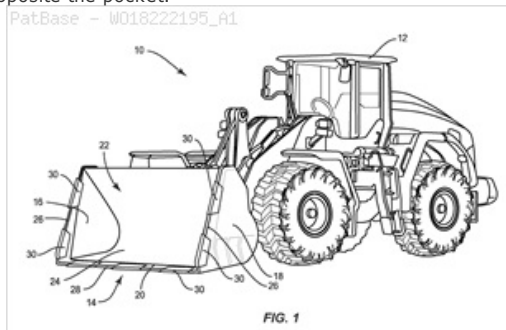
Abstract: The present disclosure relates to a wear attachment for a bucket of a construction vehicle that includes a wear body, a wedge and a threaded fastener. The wear body is provided with a threaded bore, first and second side walls, and a front wall configured to at least partially cover an edge of the bucket. At least one of the first or second side wall of the wear body defines a pocket. The threaded fastener cooperates with the threaded bore to couple the wedge to the wear body. The threaded fastener also couples the wear body to an edge of the bucket by driving the wedge into the pocket and forcefully wedging the wedge between the pocket and the bucket so that the wedge applies a normal force on the bucket to clamp the bucket between the wedge and a portion of the first or second wall opposite the pocket.

Classifications:

International (IPC 8-9): E02F3/40 E02F3/815

E02F9/28 (Advanced/Invention)

CPC: E02F3/40 E02F3/815 E02F9/28



Family:

Publication number	Publication date	Application number	Application date
WO18222195 A1	20181206	WO2017US35388	20170601

Priority:

WO2017US35388 20170601

Probable Assignee: AB VOLVO

Assignee(s): (std): RIFE KYLE ; VOLVO CONSTR EQUIP AB

Assignee(s): AB VOLVO ; VOLVO CONSTRUCTION EQUIPMENT AB

Inventor(s): (std): RIFE KYLE

Agent(s): HICKS JACK B

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
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