

6 Documents

Publication numbers	Title	Current assignees
WO201963856 A1	Single-lever smart cartridge for a tap fitting, single-lever smart tap fitting and method of smart management for a single-lever tap fitting	I COMPONENTS STUDIO
EP1249649 A2	Sanitary fitting	GROHE WATER TECHNOLOGY
FR2755740 A1	MIXER CARTRIDGE THERMOGRADUELLE, PROGRESSIVE, HAS SAVING OF WATER, FOR A SINGLE CONTROL MIXING TAPS HAS	RAF RUBINETTERIE
WO9629530 A1	Multiposition cartridge-holder mechanism for monocontrol taps	SUPERGRIF
EP-681127 A1	Water fitting	GROHE ARMATUREN FRIEDRICH
US5340018 A	Thermostatically controlled mixing valve	MASCO

Single-lever smart cartridge for a tap fitting, single-lever smart tap fitting and method of smart management for a single-lever tap fitting

WO201963856 A1

<u>Current assignees</u>	<u>IPC - International classification</u>		
I COMPONENTS STUDIO*	E03C-001/04	F16K-011/078*	F16K-027/04
I COMPONENTS STUDIO* S L	F16K-031/60	F16K-037/00	G01K-001/14
	H01H-003/02		
<u>Inventors</u>	<u>CPC - Cooperative classification</u>		
RECIO FERNANDEZ DIEGO	F16K-011/078/7*	F16K-027/04/4	F16K-031/60/5
LOPEZ RODRIGUEZ DANIEL	F16K-031/60/7	F16K-037/00/5	G01K-001/14/3
	G01K-013/02	H01H-003/02/06	H01H-003/42
<u>Priority data including date</u>			
2017WO-ES70641 2017-09-29			

Family

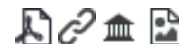
[AU2017434343](#)

A1 2020-03-26



[WO2019/063856](#)

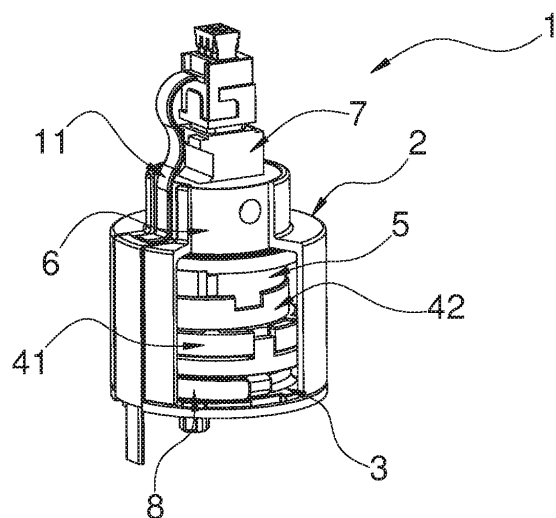
A1 2019-04-04



(WO2019/063856)

The present invention provides a smart monocontrol cartridge for taps, a smart tap that incorporates said cartridge, and a smart system that incorporates said tap, the monocontrol cartridge comprising a base (3) with a lower end (34), an upper end (35) for coupling to ceramic discs (4) and an intermediate portion (36) in which a recess (3R) is defined in which an electronic module (8) is coupled that is configured to house indirect temperature detection means (9) configured to detect the temperature in the mixed water channel and electronic means configured to calculate the real temperature in the mixed water channel based on an indirect temperature detection, the indirect temperature detection means being in data communication with the electronic means; and wherein a flexible cable (11) is coupled between the electronic module and a cam (7).

FIG. 1



Latest standardized assignees - inventors removed

I COMPONENTS STUDIO

Publication numbers

AU2017434343

WO2019/063856

Abstract

(WO2019/063856)

The present invention provides a smart monocontrol cartridge for taps, a smart tap that incorporates said cartridge, and a smart system that incorporates said tap, the monocontrol cartridge comprising a base (3) with a lower end (34), an upper end (35) for coupling to ceramic discs (4) and an intermediate portion (36) in which a recess (3R) is defined in which an electronic module (8) is coupled that is configured to house indirect temperature detection means (9) configured to detect the temperature in the mixed water channel and electronic means configured to calculate the real temperature in the mixed water channel based on an indirect temperature detection, the indirect temperature detection means being in data communication with the electronic means; and wherein a flexible cable (11) is coupled between the electronic module and a cam (7).

Inventors

RECIO FERNANDEZ DIEGO

LOPEZ RODRIGUEZ DANIEL

Title

Single-lever smart cartridge for a tap fitting, single-lever smart tap fitting and method of smart management for a single-lever tap fitting

Publication numbers with kind code & date

AU2017434343	A1	2020-03-26	AU2017434343
WO2019/063856	A1	2019-04-04	WO201963856

**Current assignees**

I COMPONENTS STUDIO

I COMPONENTS STUDIO S L

Original document**Earliest application date**

2017-09-29

TI

Single-lever smart cartridge for a tap fitting, single-lever smart tap fitting and method of smart management for a single-lever tap fitting

Sanitary fitting

EP1249649 A2

Current assignees

GROHE 58675 HEMER

GROHE ARMATUREN FRIEDRICH

GROHE WATER TECHNOLOGY*

Inventors

RUETH ANDREAS

GUENTHER MICHAEL

Priority data including date

2001DE-1017992 2001-04-10

2002DE-5000882 2002-04-04

IPC - International classification

E03C-001/04*

F16K-027/04*

CPC - Cooperative classification

E03C-001/04/01

E03C-001/04/03*

F16K-027/04/5

Family

[DE50200882](#)

D1 2004-09-30

[AT274666](#)

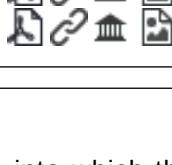
T 2004-09-15

[EP1249649](#)

B1 2004-08-25

[EP1249649](#)

A3 2003-10-01

[ES1051768](#)

Y 2003-02-01

[DE10117992](#)

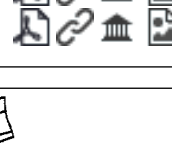
A1 2002-10-17

[EP1249649](#)

A2 2002-10-16

[ES1051768](#)

U 2002-10-01



(EP1249649)

The mixer tap has a seating at its base, into which the cartridge (2) fits. It is held in position by a bolt (4) which passes through a bore in the seating and is clamped against it by a nut (40) on its upper end.

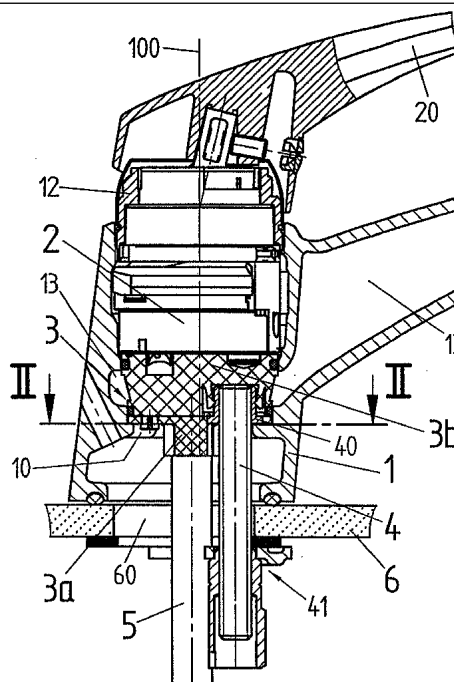


Fig.1

Latest standardized assignees - inventors removed

GROHE WATER TECHNOLOGY

Publication numbers

DE50200882

AT274666

EP1249649

EP1249649

ES1051768

DE10117992

EP1249649

ES1051768

Abstract

(EP1249649)

The mixer tap has a seating at its base, into which the cartridge (2) fits. It is held in position by a bolt (4) which passes through a bore in the seating and is clamped against it by a nut (40) on its upper end.

Inventors

RUETH ANDREAS

GUENTHER MICHAEL

Title

Sanitary fitting

Publication numbers with kind code & date

DE50200882	D1	2004-09-30	DE50200882
AT274666	T	2004-09-15	ATE274666
EP1249649	B1	2004-08-25	EP1249649
EP1249649	A3	2003-10-01	EP1249649
ES1051768	Y	2003-02-01	ES1051768Y
DE10117992	A1	2002-10-17	DE10117992
EP1249649	A2	2002-10-16	EP1249649
ES1051768	U	2002-10-01	ES1051768U

**Current assignees**

GROHE 58675 HEMER

GROHE ARMATUREN FRIEDRICH

GROHE WATER TECHNOLOGY

Original document**Earliest application date**

2001-04-10

TI

Sanitary fitting

MIXER CARTRIDGE THERMOGRADUELLE, PROGRESSIVE, HAS SAVING OF WATER, FOR A SINGLE CONTROL MIXING TAPS HAS

FR2755740 A1

Current assignees

RAF RUBINETTERIE*

Inventors

FRATTINI GIORGIO

Priority data including date

1996IT-UMI0740 1996-11-08

IPC - International classification

F16K-011/078*

CPC - Cooperative classification

F16K-011/078/7*

Family

[ES2150837](#)

B1 2001-06-01



[IT241000](#)

Y1 2001-04-20



[ES2150837](#)

A1 2000-12-01



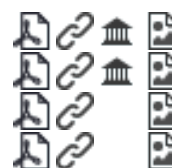
[FR2755740](#)

B1 1999-06-18



[FR2755740](#)

A1 1998-05-15



[DE19747494](#)

A1 1998-05-14



[ITMI960740](#)

U1 1998-05-08



[ITMI960740](#)

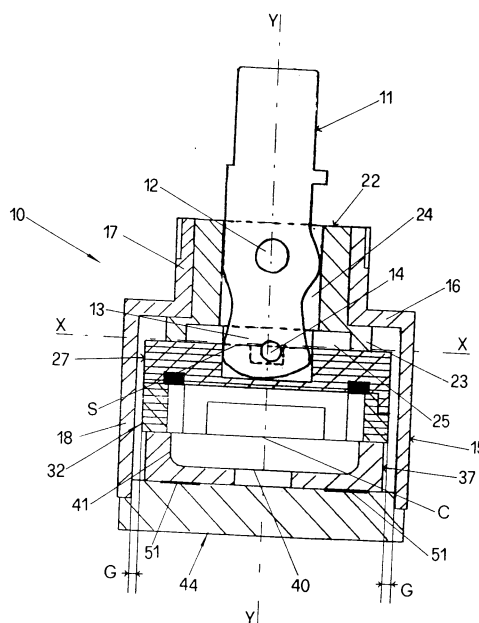
V0 1996-11-08



(FR2755740)

The mixer valve (10) e.g. for a wash basin may be operated with one hand. It has a profiled control lever (11) which may rotate on a first pivot pin (12) and has a second pin (14) at its inner end which engages a first valve element (27) inside a cylindrical housing (15). The first valve element is connected to an upper, movable disc (27) which may have a diametral opening (34). The upper disc rests on a lower, fixed disc (37) with an outlet opening (40) for mixed hot and cold water.

(From DE19747494 A1)



Latest standardized assignees - inventors removed

RAF RUBINETTERIE

Publication numbers

ES2150837

IT241000

ES2150837

FR2755740

FR2755740

DE19747494

ITMI960740

ITMI960740

Abstract

(FR2755740)

The mixer valve (10) e.g. for a wash basin may be operated with one hand. It has a profiled control lever (11) which may rotate on a first pivot pin (12) and has a second pin (14) at its inner end which engages a first valve element (27) inside a cylindrical housing (15). The first valve element is connected to an upper, movable disc (27) which may have a diametral opening (34). The upper disc rests on a lower, fixed disc (37) with an outlet opening (40) for mixed hot and cold water.

(From DE19747494 A1)

Inventors

FRATTINI GIORGIO

Title

MIXER CARTRIDGE THERMOGRADUELLE, PROGRESSIVE, HAS SAVING OF WATER, FOR A SINGLE CONTROL MIXING TAPS HAS

Publication numbers with kind code & date

ES2150837	B1	2001-06-01	ES2150837
IT241000	Y1	2001-04-20	IT-241000U
ES2150837	A1	2000-12-01	ES2150837
FR2755740	B1	1999-06-18	FR2755740
FR2755740	A1	1998-05-15	FR2755740
DE19747494	A1	1998-05-14	DE19747494
ITMI960740	U1	1998-05-08	IT96MI0740U
ITMI960740	V0	1996-11-08	IT96MI0740U

**Current assignees**

RAF RUBINETTERIE

Original document**Earliest application date**

1996-11-08

TI

MIXER CARTRIDGE THERMOGRADUELLE, PROGRESSIVE, HAS SAVING OF WATER, FOR A SINGLE CONTROL MIXING TAPS HAS

Multiposition cartridge-holder mechanism for monocontrol taps

WO9629530 A1

Current assignees

SUPERGRIF*

Inventors

CONDEMINAS LLONGUERAS RICARD

Priority data including date

1995ES-0000578 1995-03-23

1996WO-ES00062 1996-03-23

IPC - International classification

F16K-011/078* F16K-027/04

CPC - Cooperative classification

F16K-011/078/2* F16K-027/04/5

Family

[ES2121507](#)

B1 1999-06-16



[AU5005496](#)

A 1996-10-08



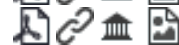
[ES2121507](#)

A1 1998-11-16



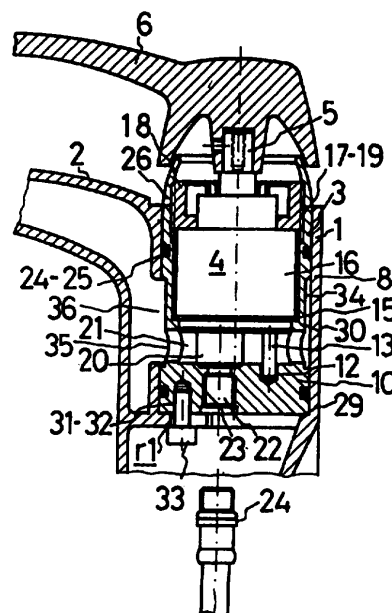
[WO96/29530](#)

A1 1996-09-26



(WO96/29530)

This mechanism comprises a shell (3) which, arranged inside a main body (1) of a tap, contains a positionnally fixed cartridge (4). The main body (1) and the shell (3) have means which fix, upon their mutual coupling, the position of the shell (3) amongst a plurality of selectable positions, and have, in the main body (1), a perimetric protuberance (29) provided with a plurality of U-shaped retention grooves (r-1, r-2), and at the bottom (10) of the shell (3) is provided a retention threaded orifice (31-32), the whole assembly being designed so that the shell (3) may be rotated about its longitudinal axis and the retention hole (31-32) remains superimposed to any other retention grooves (31-32), the positioning of the shell (3) being secured by means of a fixing screw (33).



Latest standardized assignees - inventors removed

SUPERGRIF

Publication numbers

ES2121507

ES2121507

AU5005496

WO96/29530

Abstract

(WO96/29530)

This mechanism comprises a shell (3) which, arranged inside a main body (1) of a tap, contains a positionnally fixed cartridge (4). The main body (1) and the shell (3) have means which fix, upon their mutual coupling, the position of the shell (3) amongst a plurality of selectable positions, and have, in the main body (1), a perimetric protuberance (29) provided with a plurality of U-shaped retention grooves (r-1, r-2), and at the bottom (10) of the shell (3) is provided a retention threaded orifice (31-32), the whole assembly being designed so that the shell (3) may be rotated about its longitudinal axis and the retention hole (31-32) remains superimposed to any other retention grooves (31-32), the positioning of the shell (3) being secured by means of a fixing screw (33).

Inventors

CONDEMINAS LLONGUERAS RICARD

Title

Multiposition cartridge-holder mechanism for monocontrol taps

Publication numbers with kind code & date

ES2121507	B1	1999-06-16	ES2121507
ES2121507	A1	1998-11-16	ES2121507
AU5005496	A	1996-10-08	AU9650054
WO96/29530	A1	1996-09-26	WO9629530

**Current assignees**

SUPERGRIF

Original document**Earliest application date**

1995-03-23

TI

Multiposition cartridge-holder mechanism for monocontrol taps

Water fitting

EP-681127 A1

Current assignees

GROHE 58675 HEMER
GROHE ARMATUREN FRIEDRICH*
GROHE WATER TECHNOLOGY

Inventors

PAWELZIK MANFRED
DERR MAX
KAHLE DIETER

Priority data including date

1994DE-4415797 1994-05-05
1995DE-5002802 1995-05-03

IPC - International classification

E03C-001/04 F16K-011/078 F16K-027/00*
F16K-027/04

CPC - Cooperative classification

E03C-001/04/03* F16K-027/04/5 Y10T-137/6977
Y10T-137/86549 Y10T-137/9464

PCL - US patent classification

PCLO: 137801000*
PCLX: 004677000 137359000 137625170

Family

ES2121254	T5	2004-08-01
DK0681127	T4	2003-12-08
JP3450494	B2	2003-09-22
EP0681127	B2	2003-08-13
DK0681127	T3	1999-04-19
ES2121254	T3	1998-11-16
DE59502802	D1	1998-08-20
AT168455	T	1998-08-15

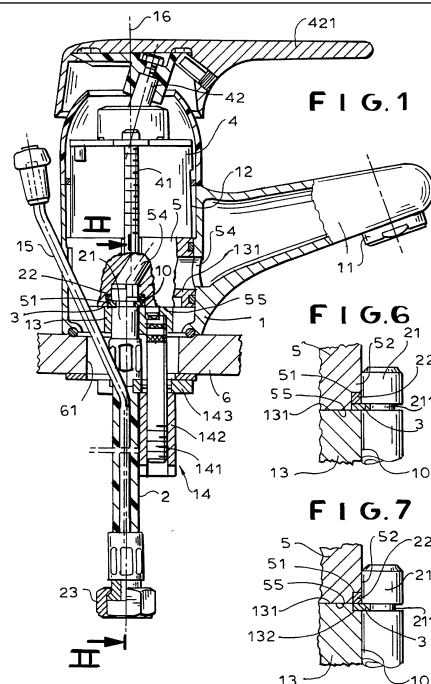


EP0681127	B1	1998-07-15
US5558128	A	1996-09-24
ES1030971	Y	1996-04-01
JP07301350	A	1995-11-14
DE4415797	A1	1995-11-09
EP0681127	A1	1995-11-08
ES1030971	U	1995-11-01



(EP0681127)

The mixing set has a housing contg. at least one connecting opening for water inflow and a water outlet opening. There is a mounting chamber for a valve cartridge insert in the housing. Each inflow conduit for water in a connecting opening and in the insert position on the inside of a housing floor is arranged axially supported with a ring union being sealed by at least one sealing ring in the valve cartridge insert. The ring union is formed as a separate spring ring (3), which in the insert position is located in a ring groove of an insert part (21) of the inflow conduit. The spring ring in its secured position in the ring groove with the valve cartridge insert incorporated is locked in the housing (1). <IMAGE>



Latest standardized assignees - inventors removed

GROHE ARMATUREN FRIEDRICH

Publication numbers

ES2121254
 DK0681127
 JP3450494
 EP0681127
 DK0681127
 ES2121254
 DE59502802
 AT168455
 EP0681127
 US5558128
 ES1030971
 JP07301350
 DE4415797
 EP0681127
 ES1030971

Abstract

(EP0681127)

The mixing set has a housing contg. at least one connecting opening for water inflow and a water outlet opening. There is a mounting chamber for a valve cartridge insert in the housing. Each inflow conduit for water in a connecting opening and in the insert position on the inside of a housing floor is arranged axially supported with a ring union being sealed by at least one sealing ring in the valve cartridge insert. The ring union is formed as a separate spring ring (3), which in the insert position is located in a ring groove of an insert part (21) of the inflow conduit. The spring ring in its secured position in the ring groove with the valve cartridge insert incorporated is locked in the housing (1). <IMAGE>

Inventors

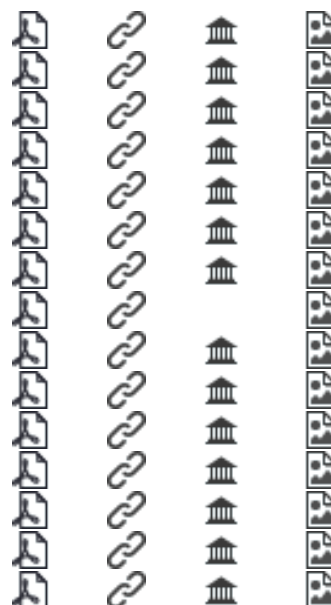
PAWELZIK MANFRED
 DERR MAX
 KAHLE DIETER

Title

Water fitting

Publication numbers with kind code & date

ES2121254	T5	2004-08-01	ES2121254
DK0681127	T4	2003-12-08	DK-681127T
JP3450494	B2	2003-09-22	JP3450494
EP0681127	B2	2003-08-13	EP-681127
DK0681127	T3	1999-04-19	DK-681127T
ES2121254	T3	1998-11-16	ES2121254
DE59502802	D1	1998-08-20	DE59502802
AT168455	T	1998-08-15	ATE168455
EP0681127	B1	1998-07-15	EP-681127
US5558128	A	1996-09-24	US5558128
ES1030971	Y	1996-04-01	ES1030971Y
JP07301350	A	1995-11-14	JP07301350
DE4415797	A1	1995-11-09	DE4415797
EP0681127	A1	1995-11-08	EP-681127
ES1030971	U	1995-11-01	ES1030971U

**Current assignees**

GROHE 58675 HEMER

GROHE ARMATUREN FRIEDRICH

GROHE WATER TECHNOLOGY

Original document



Earliest application date

1994-05-05

TI

Water fitting

Thermostatically controlled mixing valve

US5340018 A

Current assignees MASCO*	IPC - International classification F16K-011/085 F16K-031/68* G05D-023/13
Inventors MACDONALD ROBERT	CPC - Cooperative classification G05D-023/13/53*
Priority data including date 1991US-07669697 1991-03-14 1993US-08107429 1993-08-17	PCL - US patent classification PCLO: 236012200*

Family			
DK174752	B1	2003-10-20	   
FI103529	B	1999-07-15	   
KR100203705	B1	1999-06-15	   
CA2062994	C	1999-02-02	   
SE507634	C2	1998-06-29	   
ES2063627	B1	1997-11-01	   
SE9703075	D0	1997-08-26	   
SE9703076	D0	1997-08-26	   
ES2063627	R	1997-03-16	   
JP2074007	C	1996-07-25	   
JP7109263	B2	1995-11-22	   
IT1254273	B	1995-09-14	   
FR2673992	B1	1995-06-23	   
AU656558	B2	1995-02-09	   
GB2253680	B	1995-01-11	   
ES2063627	A2	1995-01-01	   
US5340018	A	1994-08-23	   
TR26015	A	1993-11-01	   
TW205588	B	1993-05-11	   
JP05099368	A	1993-04-20	   
KR920018384	A	1992-10-21	   
FR2673992	A1	1992-09-18	   
AU1115392	A	1992-09-17	   
DE4208241	A1	1992-09-17	   
GB2253680	A	1992-09-16	   
CA2062994	A1	1992-09-15	   
DK34392	A	1992-09-15	   
FI921089	A	1992-09-15	   
ITMI920582	A1	1992-09-15	   
SE9200532	L	1992-09-15	   
MX9201045	A	1992-09-01	   
GB9204349	D0	1992-04-08	   
DK34392	D0	1992-03-13	   
FI921089	A0	1992-03-13	   
ITMI920582	D0	1992-03-12	   
SE9200532	D0	1992-02-21	   

Latest standardized assignees - inventors removed

MASCO

Publication numbers

DK174752

FI103529

KR100203705

CA2062994

SE507634

ES2063627

SE9703075

SE9703076

ES2063627

JP2074007

JP7109263

IT1254273

FR2673992

AU656558

GB2253680

ES2063627

US5340018

TR26015

TW205588

JP05099368

KR920018384

FR2673992

AU1115392

DE4208241

GB2253680

CA2062994

DK34392

FI921089

ITMI920582

SE9200532

MX9201045

GB9204349

DK34392

FI921089

ITMI920582

SE9200532

Abstract

(US5340018)

A mixing valve having a modular cartridge containing a volume control valve and a thermostatic valve. The cartridge comprises a tubular sleeve having rotatably disposed therein a hollow cylindrical housing containing a valve plate mounted on its bottom end. The valve plate cooperates with a fixed valve plate in a nose piece of the cartridge to control the volumetric flow of water into the cartridge. An inner housing is disposed within the hollow cylindrical housing and defines therewith cold and hot water inlet passageways which are in communication with a mixing chamber in the interior of the inner housing via cold and hot water supply openings. The thermostatic control valve includes a temperature responsive element disposed in the mixing chamber which is operably connected to a piston which is axially slidably movable in a cylinder. The cylinder is fixedly mounted on the top of the inner housing with the bottom of the cylinder and the top of the

Inventors

MACDONALD ROBERT

Thermostatically controlled mixing valve

Publication numbers with kind code & date

DK174752	B1	2003-10-20	DK-174752	                                    	                                    	                                    	                                    
FI103529	B	1999-07-15	FI-103529	    			
KR100203705	B1	1999-06-15	KR100203705	                                    	                                    	                                    	                                    
CA2062994	C	1999-02-02	CA2062994	                                    	                                    	                                    	                                    
SE507634	C2	1998-06-29	SE-507634	                  			

MASCO

1992-02-21

TI

Thermostatically controlled mixing valve