



New connection on: : 15-09-2018 : 06:11:21 - Last disconnection on: : 15-09-2018 : 06:11:21

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

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[EPODOC: SS 6] ..fi

Select a database: ..FI EPODOC

 Database: EPODOC

[EPODOC: SS 6] cartridge 4d image

Results in EPODOC 21.554

[SS 7] device or apparatus or system

Results in EPODOC 25.090.998

[SS 8] 6 and 7

Results in EPODOC 20.672

[SS 9] movable

Results in EPODOC 1.204.820

[SS 10] 8 and 9

Results in EPODOC 954

[SS 11] roller

Results in EPODOC 915.645

[SS 12] 10 and 11

Results in EPODOC 318

[SS 13] elastic

Results in EPODOC 838.937

[SS 14] 12 and 13

Results in EPODOC 23

[SS 15] ..v

[EPODOC: SS 15] ..li



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PN - [RU2663248](#) C1 20180803

PR - JP20140242577 20141128; JP20140242602 20141128; JP20140242578 20141128; JP20140242601 20141128; JP20150231356 20151127; WO2015JP83463 20151127

AP - RU20170122459 20151127

DT - I

CT - || STSE (C1)
[JP2005049524](#) A 20050224 [] (BROTHER IND LTD);
[US2012057899](#) A1 20120308 [] (ASANUMA NAOYA [JP], et al);
[EP1207437](#) A2 20020522 [] (CANON KK [JP]);
[RU2398257](#) C2 20100827 [] (CANON KK [JP])

CCI - [G03G21/1817](#) ; [G03G21/1842](#)

CQI - [G03G21/1619](#)

CNOI - [G03G21/16](#)

CCA - [G03G21/1647](#) ; [G03G21/1825](#) ; [G03G21/1857](#)

PA - KENON KK [JP]

TI - CARTRIDGE, ITEM FORMING THE **CARTRIDGE** AND THE **IMAGE FORMATING DEVICE**

AB - FIELD: image forming devices. SUBSTANCE: present invention relates to an **image forming apparatus**, to a **cartridge**, with the possibility of detachment installed on the main body of the **device** for the image forming **apparatus**, and to the elements constituting the cartridge. Claimed group of inventions includes variants of cartridges that can be installed in the image forming **apparatus** into the main unit of the **device**, and variants of the frame members constituting the cartridge frame that can be mounted in the image forming **apparatus** to the main assembly of the **device**. In this case, the cartridge comprises: a developing **roller**, a frame supporting the development **roller**, a **movable** part supported for movement by a frame and moved to a first position and a second position with respect to the frame, and an **elastic** part provided between the frame and the **movable** part with the possibility of pressing the moving part, the **movable** part including the first force receiving part, which takes force from the main unit of the **device**, in the direction of travel from the first position to the second position, and a second force receiving part that receives force from the main unit of the **device**, in the direction of travel from the second position to the first position, and when the **movable** part receives the force from the main assembly of the **device** in the first force receiving part and is in the second position, **movable** part receives the urging force from the **elastic** part in the moving direction of the moving part from the second position to the first position. EFFECT: technical result is to ensure an accurate movement of the developer bearing member.
182 cl, 57 dwg

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PN - [TW201736990](#) A 20171016

PR - JP20140242577 20141128; JP20140242578 20141128; JP20140242601 20141128; JP20140242602 20141128; JP20150231356 20151127

AP - TW20170111172 20151130

DT - I

CCI - [G03G21/1817](#) ; [G03G21/1842](#)

CQI - [G03G21/1619](#)

CCA - [G03G21/1647](#) ; [G03G21/1825](#) ; [G03G21/1857](#)

PA - CANON KK [JP]

TI - **Cartridge**, member constituting **cartridge**, and **image** forming **apparatus**

AB - A cartridge that is mountable to an **apparatus** main assembly of an **image** forming **apparatus**, the **cartridge** includes a developing **roller**; a frame supporting the developing **roller**; a **movable** part movably supported by the frame and **movable** to a first position and to a second position relative to the frame; and an **elastic** part provided between the frame and the **movable** part to urge the **movable** part. The **movable** part includes a first force receiving part that receives force from the **apparatus** main assembly, in a direction of moving from the first position to the second position, and a second force receiving part that receives force from the **apparatus** main assembly, in a direction of moving from the second position to the first position. When the **movable** part receives force from the **apparatus** main assembly at the first force receiving part and is at the second position, the **movable** part receives urging force from the **elastic** part in a direction of moving the **movable** part from the second position to the first position.

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PN - [PH12017500985](#) A1 20171211

PR - JP20140242577 20141128; JP20140242601 20141128; JP20140242602 20141128; JP20150231356 20151127; JP20140242578 20141128; WO2015JP83463 20151127

AP - PH20171500985 20170526

DT - I

CCI - [G03G21/1817](#) ; [G03G21/1842](#)

CQI - [G03G21/1619](#)

CCA - [G03G21/1647](#) ; [G03G21/1825](#) ; [G03G21/1857](#)

PA - CANON KK [JP]

TI - **CARTRIDGE MEMBER CONSTITUTING CARTRIDGE AND IMAGE FORMING APPARATUS**

AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

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PN - [MX2017006905](#) A 20170815

PR - JP20140242577 20141128; JP20140242578 20141128; JP20140242601 20141128; JP20140242602 20141128; JP20150231356 20151127; WO2015JP83463 20151127

AP - MX20170006905 20151127

DT - I

CCI - [G03G21/1817](#) ; [G03G21/1842](#)

CQI - [G03G21/1619](#)

PA - CANON KK [JP]

TI - **CARTRIDGE MEMBER CONFIGURING CARTRIDGE AND IMAGE FORMATION DEVICE.**

AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

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PN - [US2017261927](#) A1 20170914

PR - JP20140242577 20141128; JP20140242578 20141128; JP20140242601 20141128; JP20140242602 20141128; JP20150231356 20151127; WO2015JP83463 20151127

AP - US201715606070 20170526

DT - *; Rep

CCI - [G03G21/1817](#) ; [G03G21/1842](#)

CQI - [G03G21/1619](#)

PA - CANON KK [JP]

TI - **CARTRIDGE MEMBER CONSTITUTING CARTRIDGE AND IMAGE FORMING APPARATUS**

AB - A cartridge that is mountable to an **apparatus** main assembly of an **image** forming **apparatus**, the **cartridge** includes a developing **roller**; a frame supporting the developing **roller**; a **movable** part movably supported by the frame and **movable** to a first position and to a second position relative to the frame; and an **elastic** part provided between the frame and the **movable** part to urge the **movable** part. The **movable** part includes a first force receiving part that receives force from the **apparatus** main assembly, in a direction of moving from the first position to the second position, and a second force receiving part that receives force from the **apparatus** main assembly, in a direction of moving from the second position to the first position. When the **movable** part receives force from the **apparatus** main assembly at the first force receiving part and is at the second position, the **movable** part receives urging force from the **elastic** part in a direction of moving the **movable** part from the second position to the first position.

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- PN - [CN107111269](#) A 20170829
- PR - JP20140242577 20141128; JP20140242578 20141128; JP20140242601 20141128; JP20140242602 20141128; WO2015JP83463 20151127
- AP - CN2015873447 20151127
- DT - I
- CCI - [G03G21/1817](#) ; [G03G21/1842](#)
- CQI - [G03G21/1619](#)
- CCA - [G03G21/1647](#) ; [G03G21/1825](#) ; [G03G21/1857](#)
- PA - CANON KK
- TI - **Cartridge**, member configuring **cartridge**, and **image** formation **device**
- AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

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- PN - [GB2549026](#) A 20171004
- PR - WO2015JP83463 20151127; JP20140242601 20141128; JP20140242577 20141128; JP20140242602 20141128; JP20140242578 20141128; JP20150231356 20151127
- AP - GB20170010248 20151127
- DT - **
- CT - || STSE (A)
[JP2005049524](#) A 20050224 [] (BROTHER IND LTD)
- CCI - [G03G21/1817](#) ; [G03G21/1842](#)
- CQI - [G03G21/1619](#)
- CNOI - [G03G21/16](#) ; [G03G21/18](#)
- PA - CANON KK [JP]
- TI - **Cartridge**, member configuring **cartridge** and **image** formation **device**
- AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the

first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

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- PN - [AU2015354534](#) A1 20170622
- PR - JP20140242601 20141128; JP20150231356 20151127; JP20140242577 20141128; JP20140242602 20141128; JP20140242578 20141128; WO2015JP83463 20151127
- AP - AU20150354534 20151127
- DT - I
- CCI - [G03G21/1817](#) ; [G03G21/1842](#)
- CQI - [G03G21/1619](#)
- PA - CANON KK
- TI - **Cartridge**, member configuring **cartridge**, and **image** formation **device**
- AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

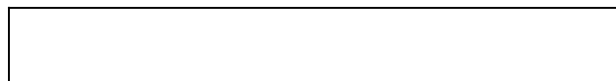
9/23 © EPODOC / EPO

- PN - [CA2969088](#) A1 20160602
- PR - JP20140242577
20141128; JP20140242602
20141128; JP20140242578
20141128; JP20140242601
20141128; JP20150231356
20151127; WO2015JP83463
20151127
- AP - CA20152969088 20151127
- DT - I
- CCI - [G03G21/1817](#) ;
[G03G21/1842](#)
- CQI - [G03G21/1619](#)
- PA - CANON KK [JP]
- TI - **CARTRIDGE**, MEMBER
CONSTITUTING **CARTRIDGE**
AND **IMAGE**
FORMING **APPARATUS**
- AB - The purpose of the present invention is to accurately



press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable** part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

10/23 © EPODOC / EPO
 PN - [TW201621483](#) A 20160616
 PNFP - TWI588627B B 20170621
 PR - JP20140242577
 20141128; JP20140242578
 20141128; JP20140242601
 20141128; JP20140242602
 20141128; JP20150231356
 20151127
 AP - TW20150139939 20151130
 DT - I
 CCI - [G03G21/1817](#) ;
[G03G21/1842](#)
 CQI - [G03G21/1619](#)
 PA - (A B)
 CANON KK [JP]



- TI - (A)
Cartridge, member
 configuring **cartridge**,
 and **image** forming **device**
- AB - (A)
 The purpose of the present
 invention is to accurately
 press and move a developer
 supporting body. A cartridge
 includes: a developing **roller**;
 a frame for supporting the
 developing **roller**; a **movable**
 part which is movably
 supported relative to the
 frame and which moves to a
 first position and a second
 position with respect to the
 frame; and an **elastic** part
 which is provided between
 the frame and the **movable**
 part and biases the **movable**
 part. The **movable** part is
 provided with a first force
 receiving part for receiving a
 force, from a **device** body, in
 a direction from the first
 position toward the second
 position, and a second force
 receiving part for receiving a
 force, from the **device** body,
 in a direction from the
 second position toward the
 first position. When
 the **movable** part is in the
 second position with the first
 force receiving part receiving
 a force from the **device** body,
 the **elastic** part biases
 the **movable** part to move
 from the second position
 toward the first position.

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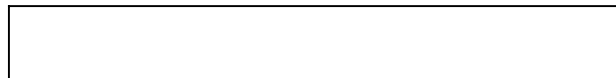
PN - [JP2016110122](#) A 20160620

PR - JP20140242577
 20141128; JP20140242602
 20141128; JP20140242578
 20141128; JP20140242601
 20141128

AP - JP20150231356 20151127

DT - I

CCI - [G03G21/1817](#) ;



	<u>G03G21/1842</u>
CQI	- <u>G03G21/1619</u>
CCA	- <u>G03G21/1647</u> ; <u>G03G21/1825</u> ; <u>G03G21/1857</u>
FI	- G03G15/08&390A; G03G21/16&176
FT	- 2H077/AA12; 2H077/AB03; 2H077/AB13; 2H077/AD06; 2H077/AD13; 2H077/AD17; 2H077/AD35; 2H077/BA03; 2H077/BA07; 2H077/BA08; 2H077/BA09; 2H077/FA21; 2H077/GA04; 2H171/FA03; 2H171/FA04; 2H171/FA13; 2H171/FA28; 2H171/GA13; 2H171/JA06; 2H171/JA23; 2H171/JA27; 2H171/JA29; 2H171/JA31; 2H171/JA40; 2H171/JA42; 2H171/JA48; 2H171/KA05; 2H171/KA06; 2H171/KA22; 2H171/KA23; 2H171/KA25; 2H171/KA27; 2H171/LA08; 2H171/LA13; 2H171/LA17; 2H171/MA02; 2H171/MA07; 2H171/QA02; 2H171/QA08; 2H171/QB15; 2H171/QB32; 2H171/QB35; 2H171/QB38; 2H171/QC03; 2H171/QC37; 2H171/QC42; 2H171/SA11; 2H171/SA14; 2H171/SA19; 2H171/SA22; 2H171/SA26; 2H171/WA07; 2H171/WA21
PA	- CANON KK
TI	- CARTRIDGE MEMBER CONSTITUTING CARTRIDGE AND IMAGE FORMING APPARATUS
AB	- PROBLEM TO BE SOLVED: To highly accurately perform the pressing and moving of a developer carrier.SOLUTION: A cartridge includes a developing roller , a frame body which supports the developing roller , a movable part which is supported to be movable with respect to the frame body and moved to a first position and a second position with respect to the

frame body, and an **elastic** part which is provided between the frame body and the **movable** part and energizes the **movable** part. The **movable** part includes a first force receiving part which receives a force in the movement direction from the first position to the second position from an **apparatus** body and a second force receiving part which receives the force in the movement direction from the second position to the first position from the **apparatus** body. When the **movable** part is located in the second position by receiving the force from the **apparatus** body by the first force receiving part, the **movable** part receives an energizing force in a direction where the **movable** part is moved from the second position to the first position from the **elastic** part. SELECTED
DRAWING: Figure 1

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PN - [EP3226076](#) A1 20171004
 PNFP - EP3226076 A4 20180509
 PR - JP20140242577
 20141128; JP20140242602
 20141128; JP20140242578
 20141128; JP20140242601
 20141128; WO2015JP83463
 20151127
 AP - EP20150862416 20151127
 DT - *; Rep
 CT - || STSE (A4)
[US2012057899](#) A1 20120308
 [X] (ASANUMA NAOYA [JP], et al)
 [X] 1-3,9,10,12,13
 * paragraphs [0058] - [0187];
 figures 1-18, 26-33 *;
[EP1207437](#) A2 20020522
 [A] (CANON KK [JP])
 [A] 1-13



* paragraphs [0025] , [0 88] -
 [0096]; figures 1-9 *;
[US2004184835](#) A1 20040923
 [A] (PARK DONG-HOON [KR])
 [A] 1-13
 * paragraphs [0043] - [0048];
 figure 5 *

- CCI - [G03G21/1817](#) ;
[G03G21/1842](#)
- CQI - [G03G21/1619](#)
- CCA - [G03G21/1647](#) ;
[G03G21/1825](#) ;
[G03G21/1857](#)
- PA - (A1 A4)
 CANON KK [JP]
- TI - (A1 A4)
CARTRIDGE MEMBER
 CONFIGURING **CARTRIDGE**,
 AND **IMAGE**
 FORMATION **DEVICE**
- AB - (A1)
 Movement and/or urging of a
 developer carrying member is
 carried out with high
 precision. A cartridge that is
 mountable to an **apparatus**
 main assembly of an **image**
 forming **apparatus**,
 the **cartridge** includes a
 developing **roller**; a frame
 supporting the
 developing **roller**; a **movable**
 part movably supported by
 the frame and **movable** to a
 first position and to a second
 position relative to the frame;
 and an **elastic** part provided
 between the frame and
 the **movable** part to urge
 the **movable** part.
 The **movable** part includes a
 first force receiving part that
 receives force from
 the **apparatus** main assembly,
 in a direction of moving from
 the first position to the
 second position, and a
 second force receiving part
 that receives force from
 the **apparatus** main assembly,
 in a direction of moving from
 the second position to the

first position. When the **movable** part receives force from the **apparatus** main assembly at the first force receiving part and is at the second position, the **movable** part receives urging force from the **elastic** part in a direction of moving the **movable** part from the second position to the first position.

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PN - [WO2016084951](#) A1 20160602

PR - JP20140242577
20141128; JP20140242602
20141128; JP20140242578
20141128; JP20140242601
20141128; JP20150231356
20151127

AP - WO2015JP83463 20151127

DT - **

CT - [JP] ISR (A1)
[JP2005049524](#) A 20050224
[XA] (BROTHER IND LTD)
[X] 182
* , claims 1 to 12; paragraphs
[0075], [0089], [0090],
[0097], [0121] to [0127]; fig. 1
to 9 & US 2005/0053394 A1 &
EP 1515198 A2 & KR 10-
1023279 B1 & CN 1580970 A
& CN 2791703 Y & KR 10-
2005-0014729 A *
[A] 1-181

CCI - [G03G21/1817](#) ;
[G03G21/1842](#)

CQI - [G03G21/1619](#)

PA - CANON KK [JP]

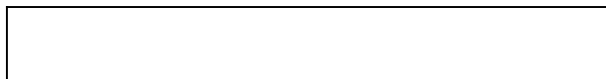
TI - **CARTRIDGE MEMBER**
CONFIGURING CARTRIDGE
AND IMAGE
FORMATION DEVICE

AB - The purpose of the present invention is to accurately press and move a developer supporting body. A cartridge includes: a developing **roller**; a frame for supporting the developing **roller**; a **movable**

part which is movably supported relative to the frame and which moves to a first position and a second position with respect to the frame; and an **elastic** part which is provided between the frame and the **movable** part and biases the **movable** part. The **movable** part is provided with a first force receiving part for receiving a force, from a **device** body, in a direction from the first position toward the second position, and a second force receiving unit for receiving a force, from the **device** body, in a direction from the second position toward the first position. When the **movable** part is in the second position with the first force receiving part receiving a force from the **device** body, the **elastic** part biases the **movable** part to move from the second position toward the first position.

14/23 © EPODOC / EPO

- PN - [KR20090080129](#) A 20090723
- PNFP - KR101038152B B1 20110531
- PR - JP20060355647 20061228
- AP - KR20097012314 20071122
- DT - I
- CT - || STSE (B1)
[JP2003015378](#) A 20030117 [
] (SEIKO EPSON CORP);
[JP2005107139](#) A 20050421 [
] (MINOLTA CO LTD);
[JP2006184901](#) A 20060713 [
] (BROTHER IND LTD)
- CCI - [G03G21/1623](#) ; [G03G21/1817](#) ;
[G03G21/1853](#) ; [G03G21/1857](#) ;
[G03G21/1871](#)
- CCA - [G03G15/0194](#) ; [G03G21/1671](#) ;
[G03G21/1676](#) ; [G03G2221/1654](#) ;
[G03G2221/1657](#) ;
[G03G2221/1684](#)
- PA - (A)



CANON KK [JP]

TI - (A B1)
PROCESS **CARTRIDGE** AND
ELECTROPHOTOGRAPHIC **IMAGE**
FORMING **APPARATUS**

AB - (A)
A process cartridge includes an
electrophotographic
photosensitive drum; a
charging **roller**; a
developing **roller**; a second frame
being rotatably connected with a
first frame; drum and
developing **roller** driving force
receiving portions; a first and
second portion-to-be-supported to
support said process cartridge on
a **movable** member; a first and a
second portion-to-be-positioned
during a lowering movement of
said **movable** member toward a
transfer belt; charging and
developing bias contacts and a
portion-to-be-urged, provided on
an upper surface of said first
frame for receiving an inclined
downward **elastic** force of a first
main assembly side **elastic**
member.

15/23 © EPODOC / EPO

PN - [KR20090085696](#) A 20090807

PNFP - KR101055426B B1 20110808

PR - WO2007JP51115
20070118; JP20060355647
20061228

AP - KR20097013423 20070118

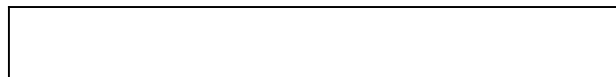
DT - I

CCI - [G03G21/1623](#) ; [G03G21/1817](#) ;
[G03G21/1853](#) ; [G03G21/1857](#) ;
[G03G21/1871](#)

CCA - [G03G15/0194](#) ; [G03G21/1671](#) ;
[G03G21/1676](#) ; [G03G2221/1654](#) ;
[G03G2221/1657](#) ;
[G03G2221/1684](#)

PA - (A)
CANON KK [JP]

TI - (A)
PROCESS **CARTRIDGE** AND
ELECTROPHOTOGRAPHIC **IMAGE**
FORMING **APPARATUS**



AB - (A)
electrophotographic
photosensitive drum, for receiving
a driving force for rotating said
developing **roller** in a direction
opposite that of said
electrophotographic
photosensitive drum in the state
in which process cartridge is
mounted to the main assembly of
the **apparatus**; 8) a first portion-to-
be-support'ed, provided on one
end of said first frame with
respect to the longitudinal
direction, for being supported by
the **movable** member to support
said process cartridge on
said **movable** member; 9) a second
portion-to-be-supported, provided
on other end of said first frame
with respect to the longitudinal
direction, for being supported by
said **movable** member to
cooperate with said first portion-
to-be-supported to support said
process cartridge on said **movable**
member; 10) a first portion-to-be-
positioned, provided on said one
longitudinal end of said first
frame co-axially with said
electrophotographic
photosensitive drum, for being
positioned to a first main
assembly side positioning portion
provided in the main assembly of
the **apparatus** during a lowering
movement of said **movable**
member toward the transfer belt;
11) a second portion-to-be-
positioned, provided on said other
longitudinal end of said second
frame co-axially with said
electrophotographic
photosensitive drum, for being
positioned to a second main
assembly side positioning portion
provided in the main assembly of
the **apparatus** during a lowering
movement of said **movable**
member toward the transfer belt;
12) a cartridge side charging bias
contact, provided exposed at the
other end, for receiving a charging

bias voltage to be supplied to said charging **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; 13) a cartridge side developing bias contact, provided exposed at the other end, for receiving a developing bias contact to be supplied to said developing **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; and 14) a portion-to-be-urged, provided on an upper surface of said first frame adjacent the other longitudinal end, for receiving an inclined downward **elastic** force of a first main assembly side **elastic** member provided in the main assembly of the **apparatus** to urge said process cartridge toward other end thereof to position the other end of said process cartridge relative to the main assembly of the **apparatus** and to urge said second portion-to-be-positioned to the second main assembly side positioning portion, in a state in which first portion-to-be-positioned is positioned to the first main assembly side positioning portion and in which said second portion-to-be-positioned is positioned to the second main assembly side positioning portion. ® KIPO & WIPO 2009

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 PN - [CN101479672](#) A 20090708
 PNFP - CN101479672B B 20121128
 PR - WO2007JP51115
 20070118; JP20060355647
 20061228
 AP - CN2007823977 20070118
 DT - I
 CCI - [G03G21/1623](#) ;
[G03G21/1817](#) ;
[G03G21/1853](#) ;



	G03G21/1857 ; G03G21/1871
CCA	- G03G15/0194 ; G03G21/1671 ; G03G21/1676 ; G03G2221/1654 ; G03G2221/1657 ; G03G2221/1684
PA	- (A) CANON KK [JP] - (B) CANON KK
TI	- (A B) Process cartridge and electrophotographic image forming apparatus
AB	- (A) An electrophotographic photosensitive drum is used for receiving driving force in the state of mounting a process cartridge to the main assembly of the device . The driving force is used for rotating the developer roller in the opposite direction of the rotation direction of the electrophotographic photosensitive drum. A first supported portion arranged on one end of the first framework relative to the longitudinal direction is used for being supported by the movable element; a second supported portion arranged on the other end of the first framework relative to the longitudinal direction is used for being supported by the movable element; a charging bias contact on the cartridge side, the other exposed end there of is used for receiving charging bias acted on the charging roller from the main assembly of the device in the state of mounting the process cartridge to the main assembly of the device ; a developer bias contact on the

cartridge side, the other exposed end thereof is used for receiving developer bias acted on the developer **roller** from the main assembly of the **device** in the state of mounting the process cartridge to the main assembly of the **device**; and a loaded portion arranged on the upper surface of the other longitudinal end approached is used for receiving an inclined downward **elastic** force and positioning the second positioned portion to the second positioned portion, position the other end of the process cartridge relative to the main assembly of the **device**, and load the second positioned portion to the second positioned portion of the main assembly side.

- (B)

An electrophotographic photosensitive drum is used for receiving driving force in the state of mounting a process cartridge to the main assembly of the **device**. The driving force is used for rotating the developer **roller** in the opposite direction of the rotation direction of the electrophotographic photosensitive drum. A first supported portion arranged on one end of the first framework relative to the longitudinal direction is used for being supported by the **movable** element; a second supported portion arranged on the other end of the first framework relative to the longitudinal direction is used for being supported by the **movable** element; a charging bias contact on the cartridge side, the other

exposed end thereof is used for receiving charging bias acted on the charging **roller** from the main assembly of the **device** in the state of mounting the process cartridge to the main assembly of the **device**; a developer bias contact on the cartridge side, the other exposed end thereof is used for receiving developer bias acted on the developer **roller** from the main assembly of the **device** in the state of mounting the process cartridge to the main assembly of the **device**; and a loaded portion arranged on the upper surface of the other longitudinal end approached is used for receiving an inclined downward **elastic** force and positioning the second positioned portion to the second positioned portion, position the other end of the process cartridge relative to the main assembly of the **device**, and load the second positioned portion to the second positioned portion of the main assembly side.

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PN - [CN101479671](#) A 20090708

PNFP - CN101479671B B 20120919

PR - WO2007JP73129
20071122; JP20060355647
20061228

AP - CN2007823955 20071122

DT - I

CCI - [G03G21/1623](#) ;
[G03G21/1817](#) ;
[G03G21/1853](#) ;
[G03G21/1857](#) ;
[G03G21/1871](#)

CCA - [G03G15/0194](#) ;
[G03G21/1671](#) ;

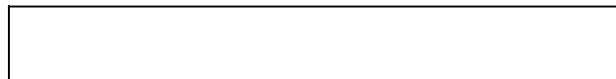


[G03G21/1676](#) ;
[G03G2221/1654](#) ;
[G03G2221/1657](#) ;
[G03G2221/1684](#)

- PA - (A)
CANON KK [JP]
- (B)
CANON KK
- TI - (A B)
Process **cartridge** and
electrophotographic **image**
forming **apparatus**
- AB - (A B)
A process cartridge includes
an electrophotographic
photosensitive drum; a
charging **roller**; a
developing **roller**; a second
frame being rotatably
connected with a first frame;
drum and developing **roller**
driving force receiving
portions; a first and second
portion-to- be-supported to
support said process
cartridge on a **movable**
member; a first and a second
portion-to-be-positioned
during a lowering movement
of said **movable** member
toward a transfer belt;
charging and developing bias
contacts and a portion-to-be-
urged, provided on an upper
surface of said first frame for
receiving an inclined
downward **elastic** force of a
first main assembly
side **elastic** member.

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- PN - [US2008159775](#) A1 20080703
- PNFP - US7856192 B2 20101221
- PR - US20070943995
20071121; JP20060355647
20061228; US20070623994
20070117
- AP - US20070943995 20071121
- DT - *, Rep
- CT - || STSE (B2)
[US6944415](#) B2 20050913 [



] (NOMURA YUJIRO [JP])
[US2005078978](#) A1 20050414 [
] (SUZUKI TATSUYA [JP], et al)
 - || R141 (A1)
[US6708011](#) B2 [];
[US2005078978](#) A1 [];
[US5950047](#) A [];
[US6944415](#) B2 []
 CCI - [G03G21/1871](#)
 CCA - [G03G2221/1684](#)
 PA - (A1 B2)
 CANON KK [JP]
 TI - (A1 B2)
 PROCESS **CARTRIDGE** AND
 ELECTROPHOTOGRAPHIC **IMAGE**
 FORMING **APPARATUS**
 AB - (A1)
 A process cartridge detachably
 mountable to a main assembly of
 an electrophotographic image
 forming **apparatus** including
 a **movable** member **movable** from
 an outside of the main assembly
 of the **apparatus** to an inside
 thereof while carrying said
 process cartridge, said process
 cartridge includes 1) an
 electrophotographic
 photosensitive drum; 2) a
 charging **roller** for charging said
 electrophotographic
 photosensitive drum; 3) a first
 frame for supporting said
 electrophotographic
 photosensitive drum and said
 charging **roller**; 4) a
 developing **roller** for developing
 an electrostatic latent image
 formed on said
 electrophotographic
 photosensitive drum with a
 developer; 5) a second frame for
 supporting said developing **roller**,
 said second frame being rotatably
 connected with said first frame; 6)
 a drum driving force receiving
 portion, provided on one
 longitudinal end of said
 electrophotographic
 photosensitive drum, for receiving
 a driving force for rotating said
 electrophotographic

photosensitive drum from the main assembly of the **apparatus** in a state in which process cartridge is mounted to the main assembly of the **apparatus**; 7) a developing **roller** driving force receiving portion, provided on one end of said second frame with respect to a longitudinal direction of said electrophotographic photosensitive drum, for receiving a driving force for rotating said developing **roller** in a direction opposite that of said electrophotographic photosensitive drum in the state in which process cartridge is mounted to the main assembly of the **apparatus**; 8) a first portion-to-be-supported, provided on one end of said first frame with respect to the longitudinal direction, for being supported by the **movable** member to support said process cartridge on said **movable** member; 9) a second portion-to-be-supported, provided on other end of said first frame with respect to the longitudinal direction, for being supported by said **movable** member to cooperate with said first portion-to-be-supported to support said process cartridge on said **movable** member; 10) a first portion-to-be-positioned, provided on said one longitudinal end of said first frame co-axially with said electrophotographic photosensitive drum, for being positioned to a first main assembly side positioning portion provided in the main assembly of the **apparatus** during a lowering movement of said **movable** member toward the transfer belt; 11) a second portion-to-be-positioned, provided on said other longitudinal end of said second frame co-axially with said electrophotographic photosensitive drum, for being positioned to a second main

assembly side positioning portion provided in the main assembly of the **apparatus** during a lowering movement of said **movable** member toward the transfer belt; 12) a cartridge side charging bias contact, provided exposed at the other end, for receiving a charging bias voltage to be supplied to said charging **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; 13) a cartridge side developing bias contact, provided exposed at the other end, for receiving a developing bias contact to be supplied to said developing **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; and 14) a portion-to-be-urged, provided on an upper surface of said first frame adjacent the other longitudinal end, for receiving an inclined downward **elastic** force of a first main assembly side **elastic** member provided in the main assembly of the **apparatus** to urge said process cartridge toward other end thereof to position the other end of said process cartridge relative to the main assembly of the **apparatus** and to urge said second portion-to-be-positioned to the second main assembly side positioning portion, in a state in which first portion-to-be-positioned is positioned to the first main assembly side positioning portion and in which said second portion-to-be-positioned is positioned to the second main assembly side positioning portion.

- (B2)

A process cartridge is detachably mountable to a main assembly of an electrophotographic image forming **apparatus** including a **movable** member **movable** from

an outside of the main assembly of the **apparatus** to an inside thereof while carrying the cartridge. The cartridge includes a drum, charging and developing rollers, rotatably connected first and second frames supporting different rollers, drum and developing **roller** driving force receiving portions, first and second portions-to-be-supported, on one and the other ends of the first frame, first and second portions-to-be-positioned, on one and the other ends of the first frame positioned to first and second main assembly side positioning portions during a lowering movement of the **movable** member toward a transfer belt, charging and developing bias contacts exposed at the other end, and a portion-to-be-urged, on the first frame upper surface for receiving an **elastic** force to position the process cartridge relative to the main assembly.

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PN - [US2008159772](#) A1 20080703
 PNFP - US7890012 B2 20110215
 PR - JP20060355647 20061228
 AP - US20070623994 20070117
 DT - *, Rep
 CT - || R141 (A1)
[US6681088](#) B2 20040120 [
] (KANNO KAZUHIKO [JP], et al);
[US7158749](#) B2 20070102 [
] (UENO TAKAHITO [JP], et al);
[US7162181](#) B2 20070109 [
] (MAESHIMA HIDEKI [JP], et al);
[US7003247](#) B2 20060221 [
] (KOISHI ISAO [JP], et al);
[US7184690](#) B2 20070227 [
] (UENO TAKAHITO [JP], et al);
[US2006051133](#) A1 20060309 [
] (KOISHI ISAO [JP], et al);
[US7024137](#) B2 20060404 [
] (NITTANI SUSUMU [JP], et al);
[US7027756](#) B2 20060411 [
] (HOSHI NOBUHARU [JP], et al);



[US2007110474](#) A1 20070517 [
] (UENO TAKAHITO [JP], et al);
[US7215909](#) B2 20070508 [
] (NITTANI SUSUMU [JP], et al);
[US7072601](#) B2 20060704 [
] (KAKITANI MASAKI [JP], et al);
[US7072603](#) B2 20060704 [
] (TSUZUKI MASATOMO [JP], et al);
[US2007160380](#) A1 20070712 [
] (IMAIZUMI CHIKARA [JP], et al);
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] (SAKURAI HIROMI [JP], et al);
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] (NOGUUCHI TOMIO [JP], et al);
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] (YOSHIMURA AKIRA [JP], et al);
[US2003156848](#) A1 20030821 [
] (KAWAI TACHIO [JP], et al);
[US2006177231](#) A1 20060810 [
] (MORI TOMONORI [JP], et al);
[US7088938](#) B2 20060808 [
] (HASHIMOTO KOJI [JP], et al);
[US7088939](#) B2 20060808 [
] (MAESHIMA HIDEKI [JP], et al);
[US5950047](#) A 19990907 [
] (MIYABE SHIGEO [JP], et al);
[US2001019418](#) A1 20010906 [
] (KATAOKA HIROSHI [JP], et al);
[US6944415](#) B2 20050913 [
] (NOMURA YUJIRO [JP]);
[US6459869](#) B2 20021001 [
] (NITTANI SUSUMU [JP], et al);
[US6463234](#) B2 20021008 [
] (ARIMITSU TAKESHI [JP], et al);
[US2005260011](#) A1 20051124 [
] (MURAYAMA KAZUNARI [JP], et
 al);
[US2006245784](#) A1 20061102 [
] (TSUZUKI MASATOMO [JP], et al);
[US2006245785](#) A1 20061102 [
] (KAWAMURA HIROSHI [JP], et al);
[US7139502](#) B2 20061121 [
] (KOISHI ISAO [JP], et al);
[US6834171](#) B2 20041221 [
] (NITTANI SUSUMU [JP], et al);
[US6980758](#) B2 20051227 [
] (MURAYAMA KAZUNARI [JP], et
 al);
[US6708011](#) B2 20040316 [
] (NOMURA YUJIRO [JP], et al)
 - || STSE (B2)
[US6944415](#) B2 20050913 [
] (NOMURA YUJIRO [JP])

- CCI - [G03G21/1623](#) ; [G03G21/1817](#) ;
[G03G21/1853](#) ; [G03G21/1857](#) ;
[G03G21/1871](#)
- CCA - [G03G15/0194](#) ; [G03G21/1671](#) ;
[G03G21/1676](#) ; [G03G2221/1654](#) ;
[G03G2221/1657](#) ;
[G03G2221/1684](#)
- PA - (A1 B2)
CANON KK [JP]
- TI - (A1)
PROCESS **CARTRIDGE** AND
ELECTROPHOTOGRAPHIC **IMAGE**
FORMING **APPARATUS**
- (B2)
Process cartridge having a drum, a
developing **roller**, and first and
second frames, and
electrophotographic image
forming **apparatus** on which such
process cartridge is mountable
- AB - (A1 B2)
A process cartridge is detachably
mountable to a main assembly of
an electrophotographic image
forming **apparatus** including
a **movable** member **movable** from
an outside of the main assembly
of the **apparatus** to an inside
thereof while carrying the process
cartridge. The cartridge includes a
drum, charging and developing
rollers, rotatably connected first
and second frames supporting
different rollers, drum and
developing **roller** driving force
receiving portions, first and
second portions-to-be-supported,
on one and the other ends of the
first frame, first and second
portions-to-be-positioned, on one
and the other ends of the first
frame positioned to first and
second main assembly side
positioning portions during a
lowering movement of
the **movable** member toward a
transfer belt, charging and
developing bias contacts exposed
at the other end, and a portion-to-
be-urged, on the first frame upper
surface for receiving an **elastic**
force to position the process

cartridge relative to the main assembly.

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PN - [JP2003076144](#) A 20030314

PR - JP20010271220 20010907

AP - JP20010271220 20010907

DT - I

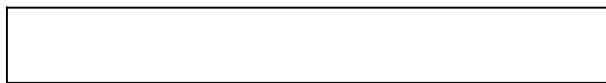
FI - G03G15/00&556;
G03G15/08&233;
G03G15/08&505C;
G03G21/16&176;
G03G21/18&132

FT - 2H071/BA04; 2H071/BA13;
2H071/DA08; 2H071/EA10;
2H077/BA09; 2H077/CA12;
2H077/CA15; 2H171/FA02;
2H171/FA03; 2H171/FA09;
2H171/FA13; 2H171/GA01;
2H171/GA29; 2H171/JA06;
2H171/JA23; 2H171/JA27;
2H171/JA31; 2H171/JA40;
2H171/JA43; 2H171/KA05;
2H171/KA06; 2H171/KA11;
2H171/KA22; 2H171/KA23;
2H171/KA24; 2H171/KA25;
2H171/LA08; 2H171/QA02;
2H171/QA08; 2H171/QA13;
2H171/QB03; 2H171/QB08;
2H171/QB15; 2H171/QB17;
2H171/QB32; 2H171/QB35;
2H171/QB37; 2H171/QB38;
2H171/QB52; 2H171/QC03;
2H171/QC11; 2H171/QC22;
2H171/QC26; 2H171/QC36;
2H171/SA10; 2H171/SA12;
2H171/SA19; 2H171/SA22;
2H171/SA26; 2H171/SA31;
2H171/SA32; 2H171/TA20

PA - CANON KK

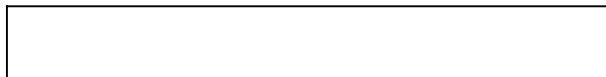
TI - DEVELOPING **DEVICE**,
PROCESS **CARTRIDGE** AND
ELECTROHOTOGRAPHIC **IMAGE**
FORMING **DEVICE**

AB - PROBLEM TO BE SOLVED: To
stabilize pressure pressing a
developer carrier against a
photoreceptor drum even if the
amount of a developer in a
developer storage part varies
and to actualize an excellent seal



between a moving frame body and a developing unit frame body by making a frame body holding the developer carrier, a restricting means, etc., **movable** to and away from the developing unit frame body and developer storage part. SOLUTION: The moving frame body 40 holding a developing **roller** 20 which develops toner on the photoreceptor drum, magnetic seal members 60 provided at both end parts of a developing **roller** 20, and a developing blade 22 for forming a toner layer on the developing **roller** 20 is held movably on the developing unit frame body 50 fixed to a toner storage part, and **elastic** seal parts 44, 45, and 49 are arranged between a projection part of the magnetic seal member 60 which projects from the moving frame body 40 and the developing unit frame body 50, and the moving frame body 40 and developing unit frame body 50 to constitute the toner seal which prevents toner from leaking between both the frame bodies.

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 PN - [JP2002055580](#) A 20020220
 PR - JP20000242026 20000810
 AP - JP20000242026 20000810
 DT - I
 FI - G03G15/16; G03G21/00;
 G03G21/00&318
 FT - 2H032/BA07; 2H032/BA23;
 2H032/BA30; 2H034/AA07;
 2H034/BF00; 2H134/GA01;
 2H134/GA06; 2H134/GA10;
 2H134/GB02; 2H134/GB05;
 2H134/HD01; 2H134/HD04;
 2H134/HD06; 2H134/HD11;
 2H134/HD19; 2H134/KD08;
 2H134/KF01; 2H134/KF03;
 2H134/KF05; 2H134/KF07;
 2H134/KG08; 2H134/KH13;



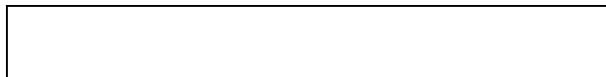
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 2H200/GA47; 2H200/GA54;
 2H200/GA56; 2H200/GB12;
 2H200/GB13; 2H200/HA02;
 2H200/HA20; 2H200/HA28;
 2H200/HB12; 2H200/HB48;
 2H200/JA02; 2H200/JB06;
 2H200/JB16; 2H200/JB31;
 2H200/JB39; 2H200/JB42;
 2H200/JC02; 2H200/JC09;
 2H200/JC12; 2H200/LA01;
 2H200/LA27; 2H200/LA38;
 2H200/LA40; 2H200/LB02;
 2H200/LB09; 2H200/LB13;
 2H200/LB17; 2H200/NA02;
 2H200/NA13

- | | |
|----|--|
| PA | - CANON KK |
| TI | - CLEANING DEVICE , IMAGE FORMING DEVICE AND PROCESS CARTRIDGE |
| AB | - PROBLEM TO BE SOLVED: To provide a cleaning device capable of preventing the increase of the driving torque of a member to be cleaned, and also, capable of preventing toner and additives from melt-sticking to the surface of the member to be cleaned for a long period. SOLUTION: The cleaning device for removing the foreign matter on the surface of a movable photoreceptor drum 1 (member to be cleaned) by allowing the edge part of an elastic blade 2 to abut on the surface of the movable photoreceptor drum 1 and sliding the abutting part of the elastic blade 2 on the surface of the photoreceptor drum 1 is provided with a brush roller (lubricant applying means) 6 for applying the lubricant 5 on the surface of the photoreceptor drum 1. Thus the quantity of the lubricant |

applied by the brush **roller** 6
in the longitudinal center
area of the photoreceptor
drum 1 is made smaller than
that in both longitudinal end
areas.

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PN - [WO2008081667](#) A1 20080710
PR - JP20060355647 20061228
AP - WO2007JP73129 20071122
DT - **
CT - |EP| ISR (A1)
[EP1621942](#) A2 20060201
[XA] (CANON KK [JP])
[X] 1-10
* paragraphs [0015] - [0126];
figures 1-8 *
[A] 11-17;
[US2003156848](#) A1 20030821
[XA] (KAWAI TACHIO [JP], et al)
[X] 1-10
* paragraphs [0065] - [0103];
figures 4-14,19 *
[A] 11-17;
[US2001019418](#) A1 20010906
[A] (KATAOKA HIROSHI [JP], et al)
[A] 11-17
* paragraphs [0122] - [0136] -
[0149] - [0160]; figures 6,9 *
CCI - [G03G21/1623](#) ; [G03G21/1817](#) ;
[G03G21/1853](#) ; [G03G21/1857](#) ;
[G03G21/1871](#)
CCA - [G03G15/0194](#) ; [G03G21/1671](#) ;
[G03G21/1676](#) ; [G03G2221/1654](#) ;
[G03G2221/1657](#) ;
[G03G2221/1684](#)
PA - CANON KK [JP]; KOISHI ISAO [JP];
NITTANI SUSUMU [JP]; TSUZUKI
MASATOMO [JP]; IMAIZUMI
CHIKARA [JP]
TI - PROCESS **CARTRIDGE** AND
ELECTROPHOTOGRAPHIC **IMAGE**
FORMING **APPARATUS**
AB - A process cartridge includes an
electrophotographic
photosensitive drum; a
charging **roller**; a
developing **roller**; a second frame
being rotatably connected with a
first frame; drum and



developing **roller** driving force receiving portions; a first and second portion-to-be-supported to support said process cartridge on a **movable** member; a first and a second portion-to-be-positioned during a lowering movement of said **movable** member toward a transfer belt; charging and developing bias contacts and a portion-to-be-urged, provided on an upper surface of said first frame for receiving an inclined downward **elastic** force of a first main assembly side **elastic** member.

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[XA] (CANON KK [JP])

[X] 1-10

* paragraphs [0015] - [0126];

figures 1-8 *

[A] 11-17;

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[XA] (KAWAI TACHIO [JP], et al)

[X] 1-10

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figures 4-14,19 *

[A] 11-17;

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[A] 11-17

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[0149] - [0160]; figures 6,9 *

CCI - [G03G21/1623](#) ; [G03G21/1817](#) ;

[G03G21/1853](#) ; [G03G21/1857](#) ;

[G03G21/1871](#)

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[G03G2221/1657](#) ;

[G03G2221/1684](#)

PA - CANON KK [JP]; KOISHI ISAO [JP];

NITTANI SUSUMU [JP]; TSUZUKI

MASATOMO [JP]; IMAIZUMI

CHIKARA [JP]

- TI - PROCESS **CARTRIDGE** AND ELECTROPHOTOGRAPHIC **IMAGE FORMING APPARATUS**
- AB - electrophotographic photosensitive drum, for receiving a driving force for rotating said developing **roller** in a direction opposite that of said electrophotographic photosensitive drum in the state in which process cartridge is mounted to the main assembly of the **apparatus**; 8) a first portion-to-be-supported, provided on one end of said first frame with respect to the longitudinal direction, for being supported by the **movable** member to support said process cartridge on said **movable** member; 9) a second portion-to-be-supported, provided on other end of said first frame with respect to the longitudinal direction, for being supported by said **movable** member to cooperate with said first portion-to-be-supported to support said process cartridge on said **movable** member; 10) a first portion-to-be-positioned, provided on said one longitudinal end of said first frame co-axially with said electrophotographic photosensitive drum, for being positioned to a first main assembly side positioning portion provided in the main assembly of the **apparatus** during a lowering movement of said **movable** member toward the transfer belt; 11) a second portion-to-be-positioned, provided on said other longitudinal end of said second frame co-axially with said electrophotographic photosensitive drum, for being positioned to a second main assembly side positioning portion provided in the main assembly of the **apparatus** during a lowering movement of said **movable** member toward the transfer belt; 12) a cartridge side charging bias

contact, provided exposed at the other end, for receiving a charging bias voltage to be supplied to said charging **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; 13) a cartridge side developing bias contact, provided exposed at the other end, for receiving a developing bias contact to be supplied to said developing **roller** from the main assembly of the **apparatus** in the state in which process cartridge is mounted to the main assembly of the **apparatus**; and 14) a portion-to-be-urged, provided on an upper surface of said first frame adjacent the other longitudinal end, for receiving an inclined downward **elastic** force of a first main assembly side **elastic** member provided in the main assembly of the **apparatus** to urge said process cartridge toward other end thereof to position the other end of said process cartridge relative to the main assembly of the **apparatus** and to urge said second portion-to-be-positioned to the second main assembly side positioning portion, in a state in which first portion-to-be-positioned is positioned to the first main assembly side positioning portion and in which said second portion-to-be-positioned is positioned to the second main assembly side positioning portion.