

PatBase - Search results 13 June 2017

Search query (1): [SP]: The invention relates to a step (4) of an escalator or a pallet (14) of a moving walkway. This step or pallet has a tread element (40) and a supporting body (30) with a base (31), wherein the tread element (40) comprises at least two part elements (41, 42, 43) and each part element (41, 42, 43) is delimited in its areal extent by two parallel end sides (45, 46) extending in the intended direction of movement (X) of the step (4, 304) or pallet (14, 114) and by two edge sides (47, 48, 147, 148) arranged orthogonally to the end sides (45, 46). The at least two part elements (41, 42, 43) are arranged in a predetermined sequence on the base (31) of the supporting body (30). Part elements (41, 42, 43) arranged next to one another are in each case situated against one another by one of their end sides (45, 46), wherein a part element (41, 42) arranged in a preceding manner on the base (31) is in each case secured on the supporting body (30) by the part element (42, 43) arranged subsequently on the base (31).

Results: 14**Search history**

Search [SP]: The invention relates to a step (4) of an escalator or a pallet (14) of a moving walkway. This step or pallet has a tread element (40) and a supporting body (30) with a base (31), wherein the tread element (40) comprises at least two part elements (41, 42, 43) and each part element (41, 42, 43) is delimited in its areal extent by two parallel end sides (45, 46) extending in the intended direction of movement (X) of the step (4, 304) or pallet (14, 114) and by two edge sides (47, 48, 147, 148) arranged orthogonally to the end sides (45, 46). The at least two part elements (41, 42, 43) are arranged in a predetermined sequence on the base (31) of the supporting body (30). Part elements (41, 42, 43) arranged next to one another are in each case situated against one another by one of their end sides (45, 46), wherein a part element (41, 42) arranged in a preceding manner on the base (31) is in each case secured on the supporting body (30) by the part element (42, 43) arranged subsequently on the base (31). (Results 14)

1) Family number: 31186268 (US5337879A)

© PatBase

Title: Tread element for moving pavement or escalator

Abstract: Source: US5337879A A tread element for a moving pavement or an escalator has a tread plate adapted to receive the person to be transported. The tread plate has a nosing secured to it along at least one of its longitudinal edges. In one embodiment, the nosing is secured to the tread plate by a longitudinal hook engaging the underside of the tread plate, a plurality of plugs passing through slots in the tread plate and secured underneath by stops such as a clamp-ring, and a plurality of centering projections which engage under a portion of the tread plate along the upper surface. The compact step is a single die-casting, which does not have to be completely removed and replaced in the event of breakage of the tread plate ribbing in the outer zone of the tread plate.

Classifications:**International (IPC 8-9):** B66B23/12 (Advanced/Invention);

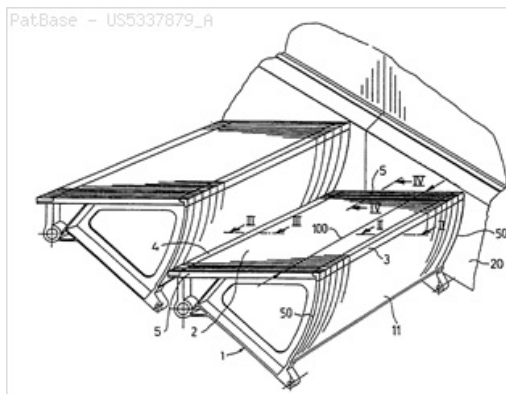
B66B23/08 (Core/Invention)

International (IPC 1-7): B65G17/06 B66B23/00 B66B23/08

B66B23/12 B66B24/12 E04F11/16 E06C

CPC: B66B23/12**European:** B66B23/12**US:** 198/333

PatBase - US5337879_A

**Family:**

Publication number	Publication date	Application number	Application date
AT242985 A	19920515	AT19850002429	19850821
AT395405 B	19921228	AT19850002429	19850821
AU198546448 A1	19860227	AU19850046448	19850820
AU584630 B2	19890601	AU19850046448	19850820
BRPI8504024 A	19860610	BR1985PI04024	19850822
CA1239889 A1	19880802	CA19850489098	19850820
CH665620 A	19880531	CH19840003995	19840821
CH670080 A	19890512	CH19850003387	19850808
CN1004872 B	19890726	CN19851006792	19850910
CN85106792 A	19870204	CN19851006792	19850910
DE3434804 A1	19860306	DE19843434804	19840919
DE3434804 C2	19901025	DE19843434804	19840919
DE3434804 C3	19901025	DE19843434804	19840919
DE3530263 A1	19860430	DE19853530263	19850821
ES296170 U	19870716	ES19870296170U	19870202
ES296170 Y	19880216	ES19870296170U	19870202
ES296170 Y1	19880216	ES19870296170U	19870202
ES296431 U	19880516	ES19850296431U	19850821
ES296431 Y	19890201	ES19850296431U	19850821
ES296431 Y1	19890227	ES19850296431U	19850821
FR2569392 A1	19860228	FR19850012561	19850821
FR2569392 B1	19891229	FR19850012561	19850821
GB2163716 A1	19860305	GB19850020958	19850821
GB2163716 B2	19880106	GB19850020958	19850821
GB8520958 A0	19850925	GB19850020958	19850821

IT1201344 A	19890127	IT19850009478	19850820
IT8509478 A0	19850820	IT19850009478	19850820
JP61090988 A2	19860509	JP19850183802	19850821
MX163482 A	19920519	MX19850206362	19850820
MX163482 B	19920519	MX19850206362	19850820
NL8502293 A	19860317	NL19850002293	19850820
NO162630 B	19891016	NO19850003283	19850820
NO162630 C	19900124	NO19850003283	19850820
NO853283 A	19860224	NO19850003283	19850820
PH23483 A	19890807	PH19850032674	19850821
PT80990 A	19850901	PT19850080990	19850820
PT80990 B	19870819	PT19850080990	19850820
SE464759 B	19910610	SE19850003883	19850820
SE464759 C	19911003	SE19850003883	19850820
SE8503883 A	19860222	SE19850003883D	19850820
SE8503883 A0	19850820	SE19850003883	19850820
SE8503883 L	19860222	SE19850003883	19850820
US5337879 A	19940816	US19920995322	19921222
ZA8506295 A	19860326	ZA19850006295	19850819
ZW13285 A	19860514	ZW19850000132	19850820

Priority:

CA19850489098 19850820 CH19840003995 19840821 US19880240084 19880902
US19910759935 19910916 US19850767604 19850820 CH19850003387 19850808
US19920995322 19921222 US19920876895 19920429

Probable Assignee: INVENTIO AG

Assignee(s): (std): DORUTSUKUGUSUBERUKU FISCHER AG ; DRUCKGUSSERK FISCHER AG ; DRUCKGUSSWERK FISCHER A G ; FISCHER DRUCKGUSSWERK AG ; INVENTIO AG ; FISCHER AG DRUCKGUSSWERK ; DRUCKGUSSWERK FISCHER TE ALPNACH DORF ZWITSERLA AG ; DRUCKGUSSWERK FISCHER ALPNACH DORF CH AG

Assignee(s): DRUCKGUSSWERK FISCHER AG TE ALPNACH DORF ZWITSERLAND ; FISCHER MORITZ ; DRUCKGUSSWERK FISCHER AG ALPNACH DORF CH ; DRUCKGUSSWERK FISCHER AG TE ALPNACH DORF ZWITSERLA ; DRUCKGUSSWERK FISCHER AG

Inventor(s): (std): FISCHER M ; FISCHER MORITZ ; MORITZ FISCHER ; M FISCHER ; FISCHER MORITZ ENGELBERG CH ; MORITSUTSU FUITSUSHIYAA

Agent(s): FB RICE; FETHERSTONHAUGH AND CO

2) Family number: 2851043 (US5150780A)

© PatBase

Title: TREAD ELEMENT FOR MOVING PAVEMENT OR ESCALATOR

Abstract: Source: US5150780A In order to provide a secure connection which can be produced in a simple manner by the pressure die casting method between edge strips (3) inserted in the step plate (2) of a step element and the step plate (2), the edge strips (3) have on their underside at least along their two longitudinal edges a respective tongue (6, 7). The cross sections of the latter two have the shape of a parallelogram with mutual identical angles or of a trapezoid and engage in corresponding grooves (8, 9) in the step plate (2) in the manner of a tongue-and-groove connection. Furthermore, these edge strips (3) are provided on their underside moreover with at least two cast-on locking pins (10) which extend downwards and through the adjacent step plate (2), and on whose free ends projecting downwards out of the step plate (2) a respective clamping ring (11) is clamped resiliently supported on the underside of the step plate 2.

Classifications:

International (IPC 8-9): B66B23/12 (Advanced/Invention);

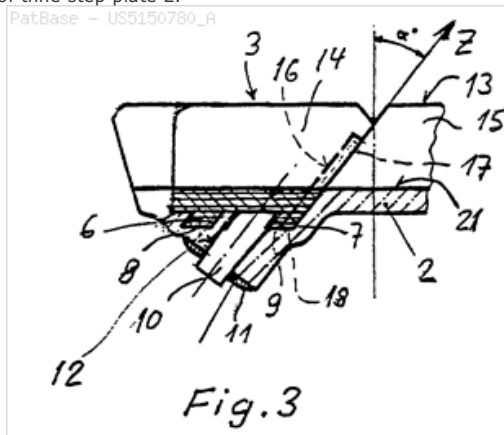
B66B23/08 (Core/Invention)

International (IPC 1-7): B66B23/12

CPC: B66B23/12

European: B66B23/12

US: 198/333



Family:

Publication number	Publication date	Application number	Application date
AT138623 E	19960615	AT19910810207T	19910322
CH680210 A	19920715	CH19900001007	19900328
CH683001 A	19931231	CH19910000026	19910107
CN1032580 C	19960821	CN19911002480	19910328
CN1056848 A	19911211	CN19911002480	19910328
DE59107854 D1	19960704	DE19915007854	19910322
DK0449780 T3	19961014	DK19910810207T	19910322
EP0449780 A2	19911002	EP19910810207	19910322
EP0449780 A3	19920610	EP19910810207	19910322
EP0449780 B1	19960529	EP19910810207	19910322
ES2090284 T3	19961016	ES19910810207T	19910322
GR3020880 T3	19961130	GR19960402239T	19960828

JP8319080 A2	19961203	JP19910228202	19910328
RU2036831 C 1	19950609	SU19914894992	19910327
US5150780 A	19920929	US19910676203	19910327

Priority:

CH19900001007 19900328 CH19910000026 19910107 CH19910000026 19910707

Probable Assignee: O AND K ROLLTREPPEN GMBH

Assignee(s): (std): FISCHER MORITZ AG ; FISHER MORITTS AG ; O AND K ESCALATOR AG ; O AND K ROLLTREPPEN GMBH

Assignee(s): O AND K ROLLTREPPEN GMBH 45525 HATTINGEN DE ; O AND KAA ROORUTORETSUPEN GMBH

Inventor(s): (std): FISCHER MORITZ ; MORITSUTSU FUITSUSHIYAA ; MORITTS FISHER

Inventor(s): MORITZ FISCHER ; FISCHER MORITZ CH 6052 HERGISWIL CH

Designated states: AT BE DE DK ES FR GB GR IT LU NL SE

3) Family number: 17733905 (US5810148A)

© PatBase

Title: Tread element for escalators and travelators

Abstract: Source: US5810148A A tread element for escalators and travelators includes a treadplate for receiving persons to be transported. The treadplate includes at least one outer portion having a plurality of recesses. A plurality of individual moldings are disposed juxtaposed to one another in the at least one outer portion. Each molding includes a plurality of stud-shaped lugs on a side of the molding facing the treadplate and passing through a corresponding one of the recesses in the at least one outer portion of the treadplate for centering the molding relative to the treadplate. Each of the plurality of moldings has edge portions. The edge portions of moldings adjoining each other include projections that at least partially overlap one another. The lugs each have a free end surface including a receiving opening for receiving a screw.

Classifications:

International (IPC 8-9): B66B23/12 (Advanced/Invention);

B66B23/00 (Advanced/Non-invention);

B66B23/08 (Core/Invention)

International (IPC 1-7): B66B23/00 B66B23/08 B66B23/12

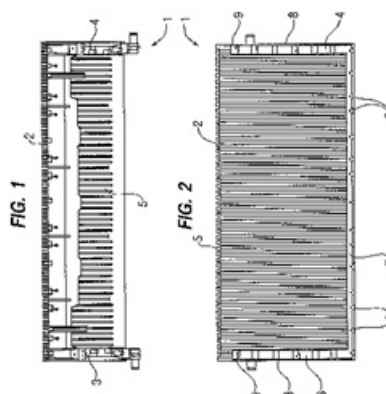
CPC: B66B23/12

European: B66B23/12

US: 198/333

PatBase - US5810148_A

U.S. Patent Sep. 22, 1998 Sheet 1 of 4 5,810,148



Family:

Publication number	Publication date	Application number	Application date
AT200264 E	20010415	AT19970107444T	19970506
CN1079077 C	20020213	CN19971011487	19970522
CN1192988 A	19980916	CN19971011487	19970522
DE29609299 U1	19971106	DE19962009299U	19960524
DE69704448 D1	20010510	DE19976004448	19970506
DE69704448 T2	20021121	DE19976004448T	19970506
EP0808792 A2	19971126	EP19970107444	19970506
EP0808792 A3	19980211	EP19970107444	19970506
EP0808792 B1	20010404	EP19970107444	19970506
ES2156317 T3	20010616	ES19970107444T	19970506
JP10045364 A2	19980217	JP19970134701	19970526
JP3967425 B2	20070829	JP19970134701	19970526
KR100229341 B1	19991101	KR19970018377	19970513
KR19970074622 A	19971210	KR19970018377	19970513
RU2169693 C2	20010627	RU19970108782	19970523
US5810148 A	19980922	US19970863353	19970527

Priority:

DE19962009299U 19960524 DE19976004448 19970506

Probable Assignee: O AND K ROLLTREPPEN GMBH AND CO KG

Assignee(s): (std): KONE CORP ; KONE OY ; O AND K ROLLTREPPEN GMBH ; O AND K ROLLTREPPEN GMBH CO KG

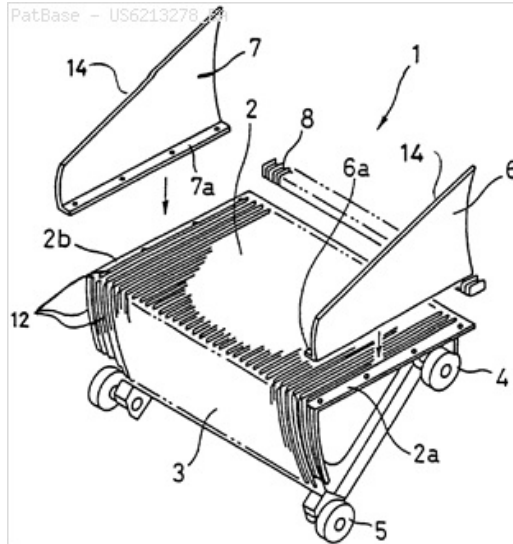
Assignee(s): O AND K ROLLTREPPEN GMBH AND CO ; O AMP AMP ; O AND K ROLLTREPPEN GMBH AND CO KG ;

Inventor(s): (std): KLAUS SHENEVAJSS ; SCHONEWEISS KLAUS ; SCHONEWEISS KLASS ; KURAUSU SHIYUEENEBUEISU ; KLAUS SCHONEWEISS ; SCHOENEWEISS KLAUS

Agent(s): KATORI TAKAO

Designated states: AT CH DE ES FR GB IT LI

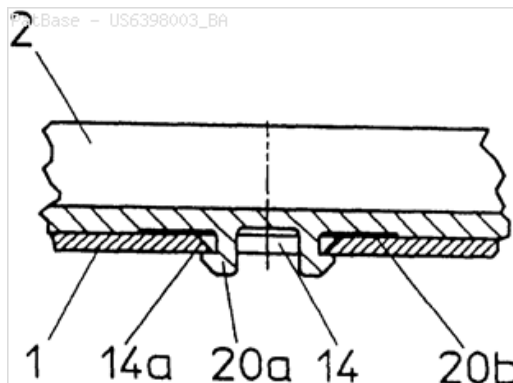
US: 198/326 198/333



Publication number	Publication date	Application number	Application date
DE19925399 A1	19991209	DE19991025399	19990602
DE19925399 C2	20031127	DE19991025399	19990602
JP11343090 A2	19991214	JP19980154062	19980603
US6213278 BA	20010410	US19990296884	19990422

Agent(s): SHIGA FUJIYA; TOMIOKA KIYOSHI; HASHIMOTO TAKESHI; KOBAYASHI HIROMICHI

US: 198/333



PatBase PDF Export - Page: 4 13/06/2017

Publication number	Publication date	Application number	Application date
CN1177751 C	20041201	CN19991023519	19991104
CN1265372 A	20000906	CN19991023519	19991104
DE19850847 A1	20000511	DE19981050847	19981104
EP1004540 A2	20000531	EP19990121602	19991029
EP1004540 A3	20020123	EP19990121602	19991029
JP2000211870 A2	20000802	JP19990313755	19991104
US6398003 BA	20020604	US19990433494	19991103

Priority:

DE19981050847 19981104

Probable Assignee: GEORG FISCHER MOSSNER GMBH

Assignee(s): (std): GEORG FISCHER MOESSNER GMBH ; GEORG FISCHER MOSSNER GMBH ; GEORG FOCHER MOSSNER GMBH ; GEORG FOSCHER MOSSNER GMBH ; MOESSNER DRUCKGUSWERK GMBH ; MOESSNER AG

Assignee(s): MOSSNER AG ; DRUCKGUSWERK MOESSNER GMBH

Inventor(s): (std): A JASNETZKIE ; JASINETZKY ARTHUR ; JASNETZKIE A

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

6) Family number: 14923145 (WO0066476A1)

© PatBase

Title: STEP OR PALLET FOR AN ESCALATOR OR MOVING WALKWAY

Abstract: The invention relates to a modular-constructed step or pallet for an escalator or moving walkway, comprising at least one support body, in particular, configured as an extruded section, in addition to several plastic tread elements which can be detachably connected for use and which form a continuous tread surface, once they are installed.

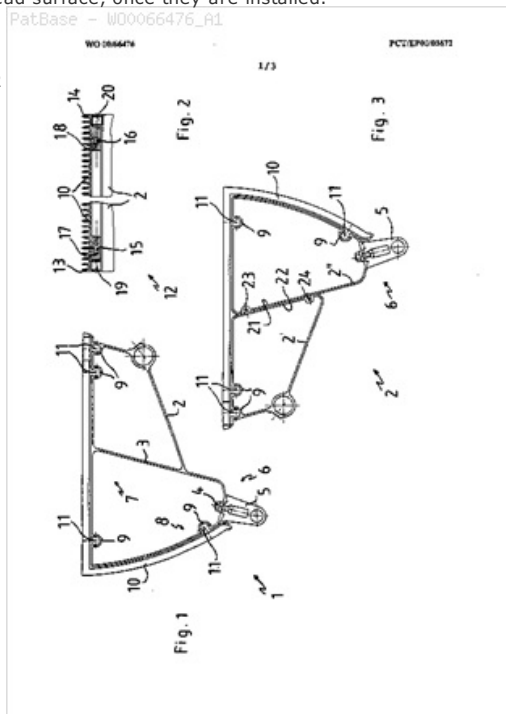
Classifications:

International (IPC 8-9): B66B23/12 (Advanced/Invention); B66B23/08 (Core/Invention)

International (IPC 1-7): B66B23/08 B66B23/12 F16L11/04 F16L11/12 F16L55/033 F16L58/10 F16L59/02

CPC: B66B23/12

European: B66B23/12



Family:

Publication number	Publication date	Application number	Application date
AU200045552 A5	20001117	AU20000045552D	20000422
DE19919710 A1	20001109	DE19991019710	19990430
DE19919710 C2	20010607	DE19991019710	19990430
WO0066476 A1	20001109	WO2000EP03672	20000422

Priority:

DE19991019710 19990430 WO2000EP03672 20000422

Probable Assignee: KONE CORP

Assignee(s): (std): KONE CORP ; SCHOENEWEISS KLAUS

Assignee(s): KONE CORP HELSINKI

Inventor(s): (std): SCHOENEWEISS KLAUS ; SCHOENEWEISS KLAUS ; SCHONEWEISS KLAUS

Inventor(s): KLAUS SCHONEWEISS

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

7) Family number: 15383310 (US6283270B)

© PatBase

Title: Escalator step with removable demarcation inserts

Abstract: Source: US6283270B An escalator step pallet has step tread and front riser portions joined together with side edges. The side edges are provided with a peripheral slot to accept replaceable demarcation inserts which identifies the side edges. The slot on the step pallet is provided with guides extending along its length to accept channels of the demarcation inserts and orient the demarcation inserts on the step pallet. Preferably, a pair of demarcation inserts are provided for each step edge, the first insert extending along the step tread and the second insert extending along the riser. The two inserts may interlock. In addition, each of the inserts is provided with a locking device which mates with a corresponding element on the step pallet to retain the insert in position. The locking device may be for example, a hook arm which engages a projection on the bottom surface of the step pallet. An access slot is provided through the insert and pallet to permit a tool to contact the hook arm to release the lock when removal of the insert is desired.

Classifications:

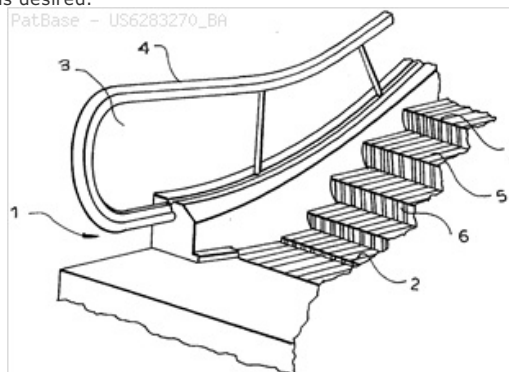
International (IPC 8-9): B66B23/12 B66B29/02 (Advanced/Invention); B66B23/08 B66B29/00 (Core/Invention)

International (IPC 1-7): B66B23/12 B66B29/02 B66G23/12

CPC: B66B23/12

European: B66B23/12

US: 198/333



Family:

Publication number	Publication date	Application number	Application date
AT414668 E	20081215	AT20000126923T	20001208
CA2328361 AA	20010616	CA20002328361	20001214
CA2328361 C	20070828	CA20002328361	20001214
DE50015456 D1	20090102	DE20005015456	20001208
EP1116681 A1	20010718	EP20000126923	20001208
EP1116681 B1	20081119	EP20000126923	20001208
JP2001199667 A2	20010724	JP20000368021	20001204
JP4675473 B2	20110420	JP20000368021	20001204
US6283270 BA	20010904	US19990464251	19991216

Priority:

CA20002328361 20001214 US19990464251 19991216

Probable Assignee: INVENTIO AG

Assignee(s): (std): INVENTIO AG

Assignee(s): INVENTIO AKTIENGESSELLSCHAFT ; ROBIBERO VINCENT P ; SMITH MELANIE JEAN ; HOLMES TERRY

Inventor(s): (std): HOLMES TERRY ; ROBIBERO VINCENT P ; SMITH MELANIE J ; SMITH MELANIE JEAN

Agent(s): RICHES MCKENZIE AND HERBERT LLP

Designated states: AT CH DE FR GB LI

8) Family number: 31881281 (US2006225988A)

© PatBase

Title: CONVEYOR

Abstract: Source: US2006225988A A pallet arrangement for a travelator comprises a pallet body comprising a profiled bar having a predetermined size, at least one surface plate attached to the pallet body and forming a wearing surface, a wheel mounted on at least one end of the pallet body, and a fastening element mounted on at least one end of the pallet body. The fastening element is adapted to couple the pallet to an actuating device.

Classifications:

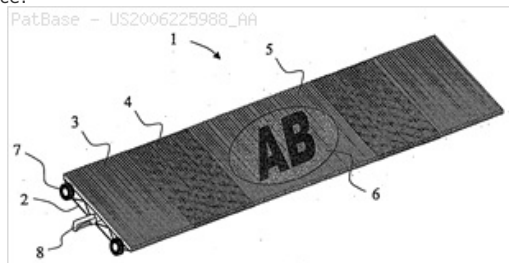
International (IPC 8-9): B65D19/38 B65D19/42 B65G15/00 B65G17/34 B66B21/00 B66B21/10 B66B23/08 B66B23/10 B66B23/12 B66B29/08 (Advanced/Invention); B66B23/08 B66B23/10 (Advanced/Non-invention); B65D19/38 B65G15/00 B65G17/32 B66B1/00 B66B21/00 B66B23/08 B66B29/00 (Core/Invention); B66B (Subclass/Invention)

International (IPC 1-7): B65D19/00 B66B B66B23/10 B66B23/12

CPC: B65D19/42 B65G17/345 B66B23/10

European: B65D19/42 B65G17/34C B66B23/10

US: 108/57.15 198/321 198/502.1



Family:

Publication number	Publication date	Application number	Application date
AT407068 E	20080915	AT20040798253T	20041101
AU2004285712 AA	20050512	AU20040285712	20041101
AU2004285712 BB	20101223	AU20040285712	20041101
BRPI0416148 A	20070109	BR2004PI16148	20041101
CA2540489 AA	20060328	CA20042540489	20041101
CA2540489 C	20100817	CA20042540489	20041101
CN100551810 C	20091021	CN200480031639	20041101
CN100586832 C	20100203	CN200480031672	20041101
CN1874952 A	20061206	CN200480031639	20041101
CN1874953 A	20061206	CN200480031672	20041101
DE602004016367 D1	20081016	DE200460016367T	20041101

EA008001 B1	20070227	EA20060000662	20041101
EA2006000662 A1	20061027	EA20060000662	20041101
EP1680329 A2	20060719	EP20040798253	20041101
EP1680329 B1	20080903	EP20040798253	20041101
EP1687227 A2	20060809	EP20040798254	20041101
ES2310296 T3	20090101	ES20040798253T	20041101
FI117240 B	20060815	FI20040000089	20040122
FI20031591 A	20050504	FI20030001591	20031103
FI20031591 A0	20031103	FI20030001591	20031103
FI20040089 A	20050504	FI20040000089	20040122
FI20040089 A0	20040122	FI20040000089	20040122
HK1096646 A1	20100520	HK20070101219	20070201
HK1096646 A3	20070608	HK20070101219	20070201
IN238712 B	20100219	IN2006KN00758	20060329
JP2007510602 T2	20070426	JP20060537332T	20041101
JP4782691 B2	20110928	JP20060537332T	20041101
KR101170696 B1	20120807	KR20067008546	20041101
KR20060111475 A	20061027	KR20067008546	20041101
US2006225988 AA	20061012	US20060416170	20060503
US2007012224 AA	20070118	US20060416384	20060503
US7370748 BB	20080513	US20060416170	20060503
US7484614 BB	20090203	US20060416384	20060503
WO05042362 A2	20050512	WO2004FI00644	20041101
WO05042362 A3	20050728	WO2004FI00644	20041101
WO05042388 A2	20050512	WO2004FI00645	20041101
WO05042388 A3	20060908	WO2004FI00645	20041101

Priority:

FI20030001591 20031103 FI20040000089 20040122 WO2004FI00644 20041101
WO2004FI00645 20041101

Probable Assignee: KONE CORP

Assignee(s): (std): AULANKO ESKO ; KONE CORP ; MUSTALAHTI JORMA ; OSSENDORF MARC

Inventor(s): (std): ESKO AULANKO ; ESKO MUSTALAHTI JORMA AULANKO ; JORMA MUSTALAHTI ; MARC AULANKO ESKO MUSTALAHTI J ; MARC OSSENDORF ; MUSTALAHTI JORMA ; AULANKO ESKO ; OSSENDORF MARC

Inventor(s): AULANKO ESKO MUSTALAHTI JORMA OSSENDORF MARC ; MUSTALAHTI JORMA AULANKO ESKO

Agent(s): COLLISON AND CO; G RONALD BELL AND ASSOCIATES; ZIPSE HABERSACK KRITZENBERGER; KATORI TAKAO; VENABLE LLP; KINBERG ROBERT; SCHWARZ STEVEN J; ROBERT; STEVEN J

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 SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

9) Family number: 32365896 (US2007036626A)

© PatBase

Title: PALLET ARRANGEMENT FOR A PEOPLE MOVER

Abstract: Source: US2007036626A A pallet arrangement for a people mover includes a plurality of pallets arranged one after the other to form a track. Each pallet comprises a pallet body, at least one surfacing element attached to the pallet body and a fastening mechanism to attach the at least one surfacing element to the pallet body. The fastening mechanism comprises at least one coupling element included in each surfacing element of the pallet, a form-locking groove included in the pallet body of the pallet and a locking element performing a locking operation with a locking movement and a releasing operation with a releasing movement. The locking element acts on all the coupling elements in the form-locking groove of the pallet body substantially simultaneously during the locking movement and the releasing movement.

Classifications:

International (IPC 8-9): B61D3/16 B66B21/10 B66B23/00

B66B23/08 B66B23/12 B66B23/18 (Advanced/Invention);

B66B23/08 B66B23/12 (Advanced/Non-invention);

B61D3/00 B66B21/00 B66B23/00 B66B23/08

B67D1/00 (Core/Invention);

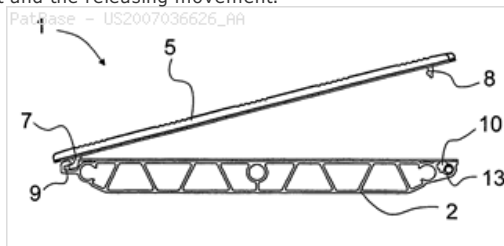
B66B (Subclass/Invention)

International (IPC 1-7): B66B B66B23/00 B66B23/08 B66B23/12

CPC: B66B23/12

European: B66B23/12

US: 198/333 410/46



Family:

Publication number	Publication date	Application number	Application date
AT442337 E	20090915	AT20050717285T	20050329
AU2005234957 AA	20051103	AU20050234957	20050329
AU2005234957 BB	20100923	AU20050234957	20050329
CA2559776 AA	20060913	CA20052559776	20050329
CA2559776 C	20120103	CA20052559776	20050329
CN100567126 C	20091209	CN200580011678	20050329
CN1942389 A	20070404	CN200580011678	20050329
DE602005016547 D1	20091022	DE200560016547T	20050329
EA008633 B1	20070629	EA20060001935	20050329
EA200601935 A1	20070227	EA20060001935	20050329
EP1755999 A2	20070228	EP20050717285	20050329
EP1755999 B1	20090909	EP20050717285	20050329
ES2329593 T3	20091127	ES20050717285T	20050329
FI116563 B	20051230	FI20040000565	20040422

FI20040565 A	20051023	FI20040000565	20040422
FI20040565 A0	20040422	FI20040000565	20040422
HK1100551 A1	20100409	HK20070105775	20070531
HK1100551 A3	20070921	HK20070105775	20070531
JP2007533576 T2	20071122	JP20070508920T	20050329
JP4814871 B2	20111116	JP20070508920T	20050329
KR101155972 B1	20120618	KR20067021120	20050329
KR20070005666 A	20070110	KR20067021120	20050329
MY139151 A	20090828	MY20050001788	20050422
TH123127 A	20130430	TH20051001756	20050420
TW200538383 A	20051201	TW20050112681	20050421
TWI341290 B	20110501	TW20050112681	20050421
US2007036626 AA	20070215	US20060584593	20061023
US7407049 BB	20080805	US20060584593	20061023
WO05102901 A2	20051103	WO2005FI00167	20050329
WO05102901 A3	20060112	WO2005FI00167	20050329

Priority:

FI20040000565 20040422 WO2005FI00167 20050329

Probable Assignee: KONE CORP

Assignee(s): (std): AULANKO ESKO ; KONE CORP ; KONE OYJ KONE CORP ; MUSTALAHTI JORMA ; OSSENDORF MARC

Assignee(s): KONE OYJ

Inventor(s): (std): MARC AULANKO ESKO MUSTALAHTI J ; MUSTALAHTI JORMA ; OSSENDORF MARC ; AULANKO ESKO ; MARC OSSENDORF ; JORMA MUSTALAHTI ; ESKO AULANKO

Inventor(s): AULANKO ESKO MUSTALAHTI JORMA OSSENDORF MARC

Agent(s): COLLISON AND CO; G RONALD BELL AND ASSOCIATES; ZIPSE HABERSACK KRITZENBERGER; KATORI TAKAO; VENABLE LLP; KINBERG ROBERT; ROBERT

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

10) Family number: 42826572 (US2010320058A)

© PatBase

Title: TREAD ELEMENTS FOR A CONVEYOR AND METHOD AND DEVICE FOR TESTING TREAD ELEMENT STRIPS

Abstract: Source: US2010320058A The invention relates to a tread element (20) for a conveyor such as an escalator or moving sidewalk. The tread element (20) comprises a tread plate (22) having a tread surface (22.1) and a strip (30), preferably of a plurality of strip elements (40, 50) on the tread surface (22.1). A fixing arrangement has a first groove element and a second tongue element, one element being attached to the tread plate (22) and the other element to the strip elements. The two elements cooperate to prevent movements of the strip elements (40, 50) relative to the tread element (20) from the tread surface (22.1) away. Interacting stop surfaces on the strip elements and on the tread plate are designed to prevent movements of the strip elements in the direction of mounting, opposite to the direction of mounting and perpendicular to the direction of mounting and in parallel to the tread surface (22.1).

Classifications:

International (IPC 8-9): B65B23/12 B66B23/12 G01N21/00

G01N3/00 (Advanced/Invention);

B66B23/12 G01N21/00 G01N3/00 (Advanced/Non-invention);

B66B23/08 (Core/Invention);

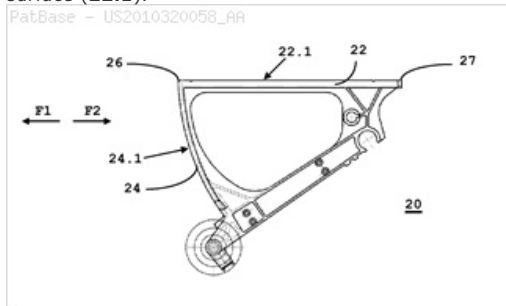
B66B (Subclass/Invention)

International (IPC 1-7): B66B23/12

CPC: B66B23/12

European: B66B23/12

US: 198/333



Family:

Publication number	Publication date	Application number	Application date
AT537100 E	20111215	AT20080786144T	20080714
BRPI0814575 A2	20150120	BR2008PI14575	20080714
CN101743188 A	20100616	CN200880024383	20080714
CN101743188 B	20120808	CN200880024383	20080714
DE502008005866 D1	20120315	DE200850005866T	20080714
EP2017216 A1	20090121	EP20070112516	20070716
EP2173652 A2	20100414	EP20080786144	20080714
EP2173652 B1	20111214	EP20080786144	20080714
HK1142865 A1	20120608	HK20100109351	20100929
IN00264CN2010 A	20100716	IN2010CN00264	20100113
KR101475973 B1	20141224	KR20107000843	20080714
KR20100040850 A	20100421	KR20107000843	20100114
US2010320058 AA	20101223	US20080669232	20080714
US8240452 BB	20120814	US20080669232	20080714
WO09010495 A2	20090122	WO2008EP59193	20080714
WO09010495 A3	20090507	WO2008EP59193	20080714

Priority:

EP20070112516 20070716 EP20080786144 20080714 WO2008EP59193 20080714

Probable Assignee: INVENTIO AG

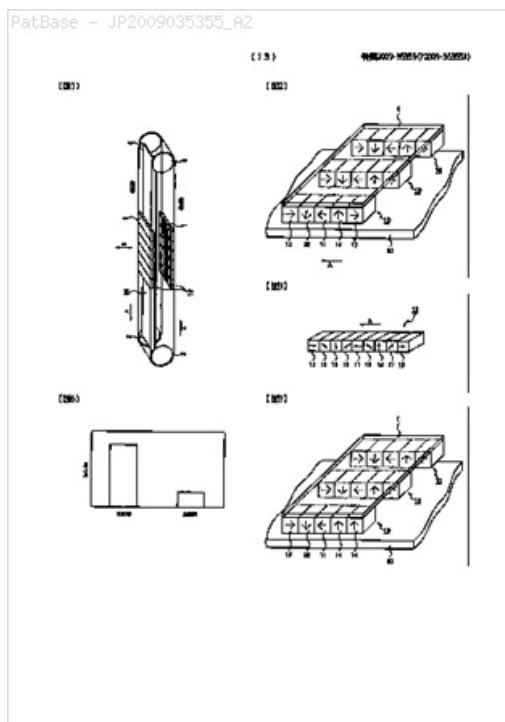
11) Family number: 42956628 (JP2009035355A)

Title: PASSENGER CONVEYER

Abstract: Source: JP2009035355A PROBLEM TO BE SOLVED: To provide a passenger conveyor capable of considerably enhancing the ride quality by suppressing the vibration associated with the movement of a step as much as possible, and reliably circulating the step with low power consumption. SOLUTION: Magnetic blocks 10 constituted by combining a plurality of magnetic pieces capable of individually setting the direction of the magnetic flux with each other are respectively arranged on back sides of a large number of steps 1 which are connected to each other in an endless manner and circulated. A non-magnetic plate 20 is arranged at least on a part of a moving path of the step 1 so that the magnetic blocks 10 are opposite to the back sides of the steps 1. The floating force is applied to the circulating steps 1 by the inductive reaction effect between the magnetic blocks 10 and the non-magnetic plate 20.

Classifications:

International (IPC 8-9): B66B21/10 B66B23/02 B66B23/12
B66B23/14 (Advanced/Invention);
B66B21/00 B66B23/00 B66B23/08 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN101357732 A	20090204	CN200810130187	20080731
CN101357732 B	20110601	CN200810130187	20080731
JP2009035355 A2	20090219	JP20070199196	20070731
JP5252384 B2	20130731	JP20070199196	20070731

Priority:

JP20070199196 20070731

Probable Assignee: TOSHIBA ELEVATOR CO LTD

Assignee(s): (std): TOSHIBA ELEVATOR CO LTD ; TOSHIBA ELEVATOR KK

Assignee(s): TOSHIBA ELEVATOR CO

Inventor(s): (std): MIZUNO SUERA ; MIZUNO SUEYOSHI ; MORISHITA AKIHIRA ; MORISHITA MIMPEI ; NODA SHINICHI ; ISHIKAWA YOSHINOBU ; TOGASHI NORIHITO ; TOMUKASHI HOHITO

Inventor(s): YOSHINOBU ISHIKAWA ; MIMPEI MORISHITA ; SHINICHI NODA ; SUERA MIZUNO ; HOHITO TOMUKASHI

Agent(s): MIYOSHI HIDEKAZU

12) Family number: 51587364 (JP2012144306A)

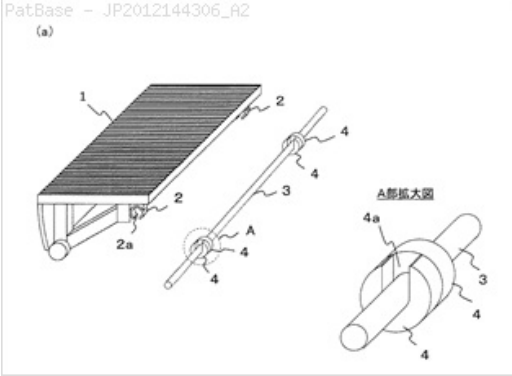
Title: STEP SUPPORT STRUCTURE OF ESCALATOR

Abstract: Source: JP2012144306A PROBLEM TO BE SOLVED: To provide a step support structure of an escalator which can easily and accurately support steps on a step shaft, which allows the easy replacement of a bearing without dismantling the step shaft.SOLUTION: The step support structure of the escalator for rotatably supporting the steps 1 of the escalator on the step shaft 3 driven in an advancing direction of the escalator includes: cylindrical step bases 2 which are provided on the steps 1 and has an opening 2a for inserting and separating the step shaft 3; and at least two U-shaped bearings 4, 4 each

including a cutout groove 4a for inserting and separating the step shaft which is formed in a disk having an outer shape substantially equal in size to the inside diameter of the step base 2 so as to be extended radially from the center of the disk and opened to the outer periphery thereof. The at least two U-shaped bearings 4, 4 are fitted and held in the step base 2 while being inserted so that the angle positions of the cutout grooves 4a to the step shaft 3 are mutually shifted.

Classifications:

International (IPC 8-9): B66B23/12 (Advanced/Invention);
B66B23/12 (Core/Invention)
International (IPC 1-7): B66B23/12



Family:

Publication number	Publication date	Application number	Application date
CN102583143 A	20120718	CN201110180311	20110630
CN102583143 B	20140716	CN201110180311	20110630
JP2012144306 A2	20120802	JP20110001878	20110107
JP5249361 B2	20130731	JP20110001878	20110107
TH118301 A	20121130	TH20111000684	20110518
TH50496 B	20160721	TH20111000684	20110518

Priority:

JP20110001878 20110107

Probable Assignee: MITSUBISHI ELECTRIC CORP

Assignee(s): (std): MITSUBISHI ELECTRIC CORP

Inventor(s): (std): ANSHITA HIDEKI ; DOI NAOGO ; DOI SHINGO ; HIDEKI IESHITA ; HIROJI YOSHIMURA ; IESHITA HIDEKI ; MAKI OKADA ; NAOGO DOI ; OKADA MAKI ; OKADA MASANORI ; YOSHIMURA HIROJI ; YOSHIMURA YUJI

13) Family number: 54423517 (JP2013154985A)

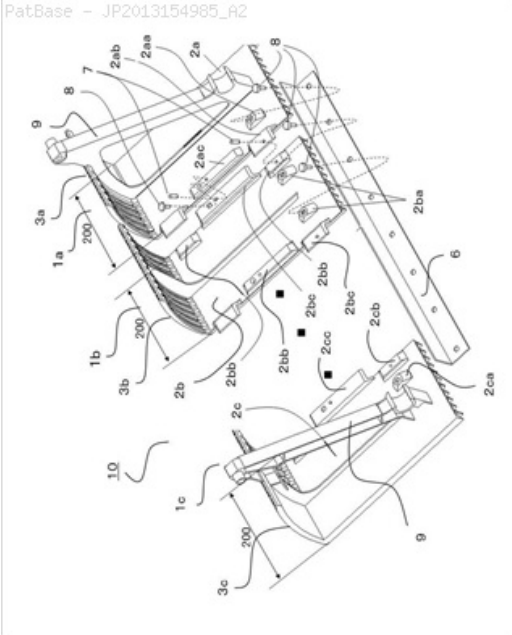
© PatBase

Title: ASSEMBLING TYPE FOOTSTEP OF PASSENGER CONVEYOR

Abstract: Source: JP2013154985A PROBLEM TO BE SOLVED: To avoid stress concentration of a connecting part, and also to ensure accuracy of dimension of assembled finished-products in a dividing/assembling type footstep of a passenger conveyor such as an escalator.SOLUTION: In a footstep of a passenger conveyor, in which a footboard part is integrated with a riser part, and a plurality of dividing footsteps divided in a crosswise direction are connectedly assembled, a boss part for connecting the footboard parts, and an L letter-like angle part protruding from a back to a side face side are provided on the backs of the respective opposite footboard parts in the dividing footstep, and the boss part and the angle part are configured to bring the plurality of dividing footsteps close in the crosswise direction, and superpose the L letter-like angle part of one dividing footstep on the boss part of the other dividing footstep to fix them connectedly.

Classifications:

International (IPC 8-9): B66B23/12 (Advanced/Invention);
B66B23/12 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN103224188 A	20130731	CN201210281385	20120809
CN103224188 B	20150506	CN201210281385	20120809
JP2013154985 A2	20130815	JP20120016092	20120130
JP5669768 B2	20150218	JP20120016092	20120130

Priority:

JP20120016092 20120130

Probable Assignee: MITSUBISHI ELECTRIC CORP

Assignee(s): (std): MITSUBISHI ELECTRIC CORP ; MITSUBISHI ELECTRIC CORP

Inventor(s): (std): ANSHITA HIDEKI ; ISHIKAWA HIROSHI ; HIROSHI ISHIKAWA ; HIDEKI IESHITA

14) Family number: 58693883 (US2016221798A)

© PatBase

Title: PALLET OF A MOVING WALKWAY OR STEP FOR AN ESCALATOR

Abstract: Source: US2016221798A The invention relates to a step (4) of an escalator or a plate (14) of a moving walkway. This comprises a tread element (40) and a support body (30) with a base (31), wherein the tread element (40) comprises at least two sub-elements (41, 42, 43) and each sub-element (41, 42, 43) is bounded in the areal extent thereof by two parallel end sides (45, 46) extending in the intended direction (X) of movement of the step (4, 304) or plate (14, 114) and two edge sides (47, 48, 147, 148) arranged orthogonally to the end sides (45, 46). The at least two sub-elements (41, 42, 43) are arranged in a predetermined sequence on the base (31) of the support body (30). Sub-elements (41, 42, 43) arranged adjacent to one another respectively bear against one another by one of the end sides (45, 46) thereof, wherein a sub-element (41, 42) previously arranged on the base (31) is secured to the support body (30) by the respective sub-element (42, 43) subsequently arranged on the base (31).

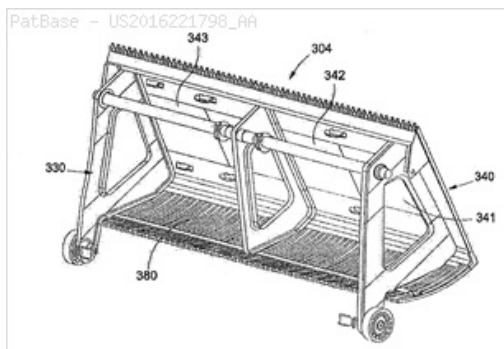
Classifications:

International (IPC 8-9): B66B21/02 B66B21/10 B66B23/02

B66B23/08 B66B23/10 B66B23/12 (Advanced/Invention)

CPC: B66B23/028 B66B23/10 B66B21/02 B66B21/10 B66B23/12

US: 198/333



Family:

Publication number	Publication date	Application number	Application date
AU2014317281 AA	20150312	AU20140317281	20140828
CA2920719 AA	20160205	CA20142920719	20140828
CL2016000514 A1	20161021	CL20160000514	20160307
CN105517941 A	20160420	CN201480048937	20140828
CN105517941 B	20170412	CN201480048937	20140828
CO16059356 A2	20160620	CO20160059356	20160308
EP3044153 A1	20160720	EP20140772293	20140828
IN201647007847 A	20160708	IN201647007847	20160307
JP2016529186 T2	20160923	JP20160539474T	20140828
KR20160051777 A	20160511	KR20167006065	20140828
MX2016002984 A1	20160602	MX20160002984	20140828
SG11201601771T A1	20160428	SG20161101771	20140828
TW201515983 A	20150501	TW20140128773	20140821
US2016221798 AA	20160804	US20140915678	20140828
US9643822 BB	20170509	US20140915678	20140828
WO15032674 A1	20150312	WO2014EP68207	20140828

Priority:

EP20130183514 20130909

EP20140772293 20140828

WO2014EP68207 20140828

Probable Assignee: INVENTIO AG

Assignee(s): (std): INVENTIO AG ; SCHINDLER GROUP

Assignee(s): SCHULZ ROBERT ; MATHEISL MICHAEL ; MAKOVEC CHRISTOPH ; EIDLER WERNER ; FRIM NORBERT ; HAUER UWE ; ILLEDITS THOMAS

Inventor(s): (std): EIDLER WERNER ; FRIM NORBERT ; HAUER UWE ; ILLEDITS THOMAS ; MAKOVEC CHRISTOPH ; MATHEISL MICHAEL ; SCHULZ ROBERT

Inventor(s): THOMAS ILLEDITS ; UWE HAUER ; WERNER EIDLER ; CHRISTOPH MAKOVEC ; MICHAEL MATHEISL ; NORBERT FRIM ; ROBERT SCHULZ

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; RICHES MCKENZIE AND HERBERT LLP; JOHANSSON AND LANGLOIS LTDA; MARGARITA CASTELLANOS ABONDANO; KAWAGUTI AND PARTNERS; LADAS AND PARRY LLP

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