

Search query (2): [SP]: modular support system a modular support system has individual frame modules each of which is formed by a series of standardized components that are secured together to form a generally elongate support structure for various uses, in particular a support structure for a conveyor. a truss frame module and a channel frame module are disclosed wherein both of the frame modules include a pair of elongate side frame members that are laterally spaced-apart and generally parallel, these frame members being secured together by a series of laterally-extending and transverse frame members. specialized connectors attach to the ends of the laterally-extending and transverse frame members, which in turn are secured to the frame members. the components of each of the frame modules are substantially identical to the other so that they can be inverted or reversed without affecting assembly of the frame. the side frame members are made by profile cutting and roll forming an elongate metal plate.

Results: 44

Search history

Search FT=(SPACE~ AND FRAME~ AND STRUCTURE~) (Results 1000000)

1:

Search [SP]: modular support system a modular support system has individual frame modules each of which is formed by a series of standardized components that are secured together to form a generally elongate support structure for various uses, in particular a support structure for a conveyor. a truss frame module and a channel frame module are disclosed wherein both of the frame modules include a pair of elongate side frame members that are laterally spaced-apart and generally parallel, these frame members being secured together by a series of laterally-extending and transverse frame members. specialized connectors attach to the ends of the laterally-extending and transverse frame members, which in turn are secured to the frame members. the components of each of the frame modules are substantially identical to the other so that they can be inverted or reversed without affecting assembly of the frame. the side frame members are made by profile cutting and roll forming an elongate metal plate. (Results 44)

Title:

Means for aligning and securing adjacent conveyor trough structures

Priority:

US19780942924 19780918

Family:

Publication number	Publication date	Application number	Application date
 US4467914 A	19840828	US19780942924	19780918

Probable Assignee:

KELLEY HUGH D

Assignee(s):(std):

KELLEY HUGH D ; TRAMMEL EDWARD L

Inventor(s):(std):

KELLEY HUGH D ; TRAMMEL EDWARD L

International class (IPC 8-9):

B65G21/02 (Advanced/Invention);
B65G21/00 (Core/Invention)

International class (IPC 1-7):

B65G21/10

CPC:

B65G21/02

European class:

B65G21/02

US class:

138/155 198/583 198/860.2 198/861

[Classification Explorer](#)

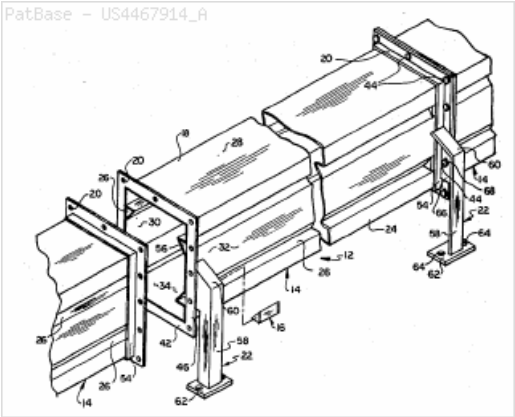
Cited documents:

DE2342750 A1, DE1088870 B,

Forward Citations:

USD623731, USD623730, USD623285, USD541405, USD503793, USD503792, USD503791, USD495048, USD494266, US9046194, US8925718, US8794429, US6969799, US6276521, US5598784, US5391840, US5246102, US2011220466, US2005109523, US2003221939, EP0713834, AT406351,

Abstract:
This invention is a means for aligning and securing adjacent conveyor trough structures which involves a conveyor trough means of specific design and an alignment and anchor wedge member that is easily usable to assure proper rigid connection and alignment of adjacent conveyor trough means. The alignment and anchor wedge member is of a special design and driven as a wedge between adjacent ends of the conveyor trough means to be interconnected and acts to positively align the conveyor chain support members which is of extreme importance to reduce wear and maintenance.

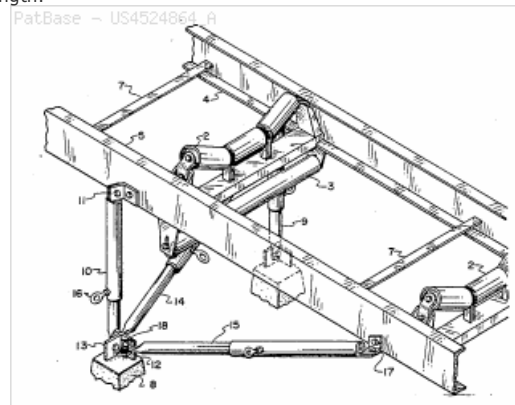


Title: Belt conveyor gap stringer support system**Priority:** US19820367563 19820412 US19840612998 19840521

Family:	Publication number	Publication date	Application number	Application date
	US4524864 A	19850625	US19840612998	19840521

Probable Assignee: PETERSON II WILLIAM D**Assignee(s):(std):** PETERSON II WILLIAM D**Inventor(s):(std):** PETERSON II WILLIAM D**International class (IPC 8-9):** B65G21/02 (Advanced/Invention);
B65G21/00 (Core/Invention)**International class (IPC 1-7):** B65G39/10**CPC:** B65G21/02**European class:** B65G21/02**US class:** 198/828 198/861.1 198/862 52/31[Classification Explorer](#)**Cited documents:** US4261460 A, US4139087 A, US4120535 A, US3348663 A, US3285393 A, US2798589 A, US1366944 A, FR1063627 A, AU224592 A1,**Forward Citations:** US8985317, US8925718, US8763791, US8177055, US8069977, US7530451, US7410128, US7287642, US6698584, US6510942, US6357705, US6070320, US2014251768, US2014102864, US2013233675, US2010213037, US2008078655, US2005224658, FR3017124, FR2946631, FR2946330, EP2261144, EP2258636, AU2005202335, AU2004226977,**Abstract:**

A gap stringer conveyor belt support structure having a pair of spaced apart parallel stringers with rollers therebetween and a pair of underlying support frames. Each support frame includes a pair of generally vertical extensible load bearing posts each of which is connected at its upper end to a stringer and at its lower end to a weight bearing anchor. A third extensible post is connected at one end to a stringer and extends in a direction diagonally to the vertical posts to connect at its other end to an anchor. The weight bearing anchors may be imbedded in the ground. The connections between the extensible posts at the stringers and anchors are pivotal to permit adjustment by movement about at least an axis parallel to the stringers. Each extensible post is provided with a clamp or lock to hold it at a selected length.



Title:

Food conveyor apparatus

Priority:

US19860918923 19861015

Family:

Publication number	Publication date	Application number	Application date
US4724953 A	19880216	US19860918923	19861015

Probable Assignee:

WINCHESTER DONALD M

Assignee(s):(std):

WINCHESTER DONALD M

Inventor(s):(std):

WINCHESTER DONALD M

International class (IPC 8-9):

B65G21/20 B65G45/10 (Advanced/Invention);
B65G21/20 B65G45/00 (Core/Invention)

International class (IPC 1-7):

B65G21/20

CPC:

B65G21/2072 B65G45/10

European class:

B65G21/20D2B B65G45/10

US class:

198/836 198/836.3 198/837 198/841 198/860.1

[Classification Explorer](#)

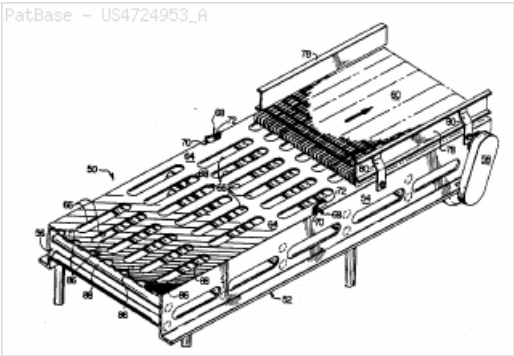
Cited documents:

US4518303 A, US4344526 A, US3850088 A, US3820650 A, US3764024 A, US3080079 A, US2922512 A, US2523562 A, US1401366 A, SU1094811 T, CH280078 A,

Forward Citations:

WO8911804, WO06120657, WO06120657, WO04037690, US9776800, US9682646, US8925718, US7562766, US7178665, US7150352, US7128201, US7128201, US7000759, US6971510, US5988363, US5860512, US5857559, US5722531, US5439096, US5400895, US5386764, US5320478, US5285885, US5040549, US4981109, US2016167885, US2016114714, US2014251768, US2013146427, US2009114103, US2009008225, US2008190744, US2006254887, US2006237292, US2006096844, US2003192769, EP1558508, EP0810168,

Abstract:
A food conveyor apparatus includes a frame, a cross support structure, and a platform. A plurality of rows of oblong holes are cut along the lengths of the platform, each row being offset from the adjacent rows of holes. The platform supports an endless mesh conveyor belt and containment clips mounted along the edges of the platform hold the conveyor belt on the platform. A plurality of vertical tubular supports are secured between the bottom of the platform and a plurality of horizontal tubular supports that extend across the width of the platform between the frame struts. A sideboard is mounted to the frame struts and positioned above the edges of the conveyor belt along the length of the platform.



Title:

Hinged belt support and enclosure system

Priority:

US19870012800 19870209 CA19880556920 19880120

Family:

Publication number	Publication date	Application number	Application date
 AU198811107 A1	19880811	AU19880011107	19880129
 AU591448 B2	19891130	AU19880011107	19880129
 BRPI8800469 A	19880920	BR1988PI00469	19880205
 CA1280993 A1	19910305	CA19880556920	19880120
 CN1014136 B	19911002	CN19881000575	19880203
 CN88100575 A	19880824	CN19881000575	19880203
 DE3803922 A1	19880818	DE19883803922	19880209
 DE3803922 C2	19911114	DE19883803922	19880209
 DE8801643 U1	19880421	DE19880001643U	19880209
 FR2610608 A1	19880812	FR19880001512	19880209
 FR2610608 B3	19890630	FR19880001512	19880209
 GB2200886 A1	19880817	GB19880001404	19880122
 GB2200886 B2	19901121	GB19880001404	19880122
 GB8801404 A0	19880224	GB19880001404	19880122
 US4760913 A	19880802	US19870012800	19870209
 ZA8800782 A	19900328	ZA19880000782	19880204

Probable Assignee:

MULTI FOLD PARTNERS PARTNERSHIP LTD

Assignee(s):(std):

HARRISON HANDLING INC

Assignee(s):

HARRISON HANDLING INC A CORP OF OH ; PATPEN CORP ; IMP TECHNOLOGIES INC ; MULTI FOLD PARTNERS LTD ; HARRISON HANDLING INC CANTON OHIO US ; MULTI FOLD PARTNERS PARTNERSHIP LTD ; TSCHANTZ WILLIAM H

Inventor(s):(std):

TSCHANTZ WILLIAM H ; TSCHANTZ WILLIAM HOWARD ; WILLIAM HOWARD TSCHANTZ

Inventor(s):

TSCHANTZ WILLIAM HOWARD CANTON OHIO US

Agent(s):

COLLISON AND CO; BORDEN LADNER GERVAIS LLP

International class

B65G15/08 B65G15/60 B65G39/071 B65G39/16 (Advanced/Invention);

(IPC 8-9):

B65G15/08 (Core/Invention)

International class

B65G15/06 B65G15/08 B65G15/40 B65G15/60 B65G21/02 B65G39/02 B65G39/071 B65G39/16

(IPC 1-7):

CPC:

B65G15/08 B65G2201/04

European class:

B65G15/08 L65G201/04

US class:

198/607 198/819 198/826 198/828 198/842

[Classification Explorer](#)

Cited documents:

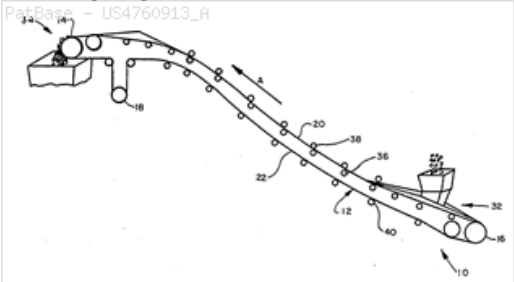
US4410482 A, US4402395 A, US4204594 A, US4094401 A, US3999646 A, US3430756 A, US3429422 A, US3138240 A, US3105588 A, US3062360 A, US2862607 A, US2839180 A, US2793738 A, US24611 A, US2365762 A, US2199935 A, US1946706 A, US1590883 A, US1366944 A, JP58207206 A2, GB418677 A, EP0168339 A1, DE3606129 A1, AU495574 A1, AU224592 A1,

Forward Citations:

WO17045058, US9371187, US9315327, US9108800, US9010526, US8925718, US8616364, US7793776, US6991093, US5373935, US5161675, US5107983, US5031753, US2014116855, US2013087432, US2012061211, US2011226591, US2008142338, US2004134759, GB2201932, DE8915255, DE202009010542, DE102011052697, CZ304502, CN105752637, CN102030171,

Abstract:

A support and enclosure system for a hinged belt conveyor includes a frame truss enclosing loaded and unloaded belt flights. The frame truss includes a plurality of vertical risers. The loaded flight rides between a plurality of troughing roll sets and top idler roll sets. The unloaded flight is supported and guided by return idler roll sets. Each of the roll sets is connected distally by a clevis to mounting shafts. The mounting shafts are accepted into mounting brackets. The mounting brackets for the troughing rolls and return idler rolls include a locking bolt for fixing the position of the shafts in the bracket. The bracket for the top idler rolls includes a spring for biasing the top idler mounting shafts outward so as to bias the top idler rolls downward onto the loaded flight. Each mounting bracket incorporates a recess for accepting a first portion of a riser and a pivoting leg for engaging an opposed section of the riser. The arm and leg are biased together by a bolt which clamps the bracket to the riser. The brackets and the roll sets connected thereto are selectively positioned on the riser both vertically and rotatably by loosening the bolt, positioning the bracket, and retightening the bolt. The system also includes an orienting pulley positioned in advance of a head pulley and the tail pulley in the direction of belt travel. The orienting pulley relieves stress and prevents the twisting of the hinged belt as it travels about the head and tail pulley. The frame truss in an alternative embodiment is covered by a cap to protect the belt and its contents from the elements and to better protect to personnel from being caught in the belt.



Title:

Priority:

Family:

Probable Assignee:

Assignee(s):(std):

Assignee(s):

Inventor(s):(std):

International class (IPC 8-9):

International class (IPC 1-7):

CPC:

European class:

US class:

Classification Explorer

Cited documents:

Forward Citations:

PORTABLE FEED MATERIAL TRANSFERRING AND BAGGING APPARATUS

US19870019457 19870226

Publication number

Publication date

Application number

Application date

US4763702 A

19880816

US19870019457

19870226

FEEDMOBILE INC

FEEDMOBILE INC

FEEDMOBILE INC 727 FURNACE HILLS PIKE ROUTE 501 NORTH LITITZ PA 17543 A CORP OF PA

HIGH JR SAMUEL E ; MAST AQUILA D

B65B1/12 (Advanced/Invention);
B65B1/10 (Core/Invention)

B65B25/02 B65B9/00

B65B1/12 B65B37/10

B65B1/12

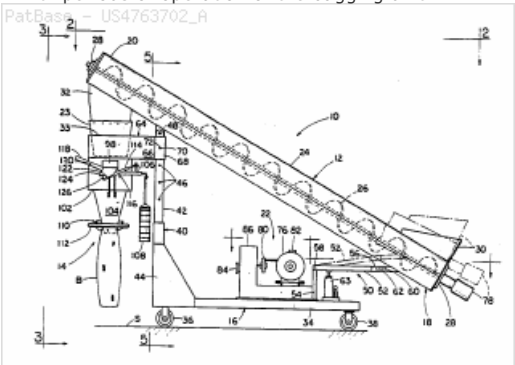
141/114 141/231 141/256 141/67 141/83

[Classification Explorer](#)

US851791 A, US726143 A, US4672794 A, US4567820 A, US4558724 A, US4484606 A, US4432186 A, US4300600 A, US3406727 A, US3083780 A, US2888045 A, US2760748 A, US1495886 A, US104297 A,

WO08068639, WO08068639, USD484148, US9045274, US9010382, US8925718, US8100301, US8042317, US6269849, US5988237, US5894871, US5437318, US5425403, US5417261, US5367857, US5121775, US4991632, US2012132316, US2012104034, US2010282780, US2008282650, US2008116039, US2008115467, US2008115462, EP3232179, CN103265041,

Abstract:
A portable feed material transferring and bagging apparatus includes a transfer conveyor and a bagging unit both mounted on a mobile frame. The transfer conveyor is mounted such that the positions of its opposite inlet and discharge ends can be vertically adjusted to elevations at which the bagging unit would not fit below its inlet end but will fit below its discharge end. The transfer conveyor is operable in a feed material transferring mode of operation to transfer feed material from its inlet to discharge end where it is received in the bagging unit. The bagging unit is mounted such that its position can be vertically adjusted to various elevations to accommodate filling bags of different sizes. The bagging unit is operable in a bag filling mode of operation to fill bags with feed material up to preset weights. A flexible duct couples the discharge end of the conveyor with the bagging unit whereby discharging of feed material from the conveyor into the bagging unit can be accomplished at any combination of respective elevations of the bagging unit and the conveyor inlet and discharge ends within their respective adjustment ranges. An arrangement of electrical and hydraulic components powering the conveyor are controlled directly by a microswitch on the bagging unit for pacing periods of operation of the conveyor in coordination with periods of operation of the bagging unit.



Title: Conveyor construction
Priority: US19880167645 19880314
Family:

Publication number	Publication date	Application number	Application date
US4951809 A	19900828	US19890380689	19890714

Probable Assignee: STEEL MASTER TRANSFER INC
Assignee(s):(std): STEEL MASTER TRANSFER INC
Inventor(s):(std): BARNWELL DAVID R ; BOOTHE DAVID V
International class (IPC 8-9): B65G21/02 (Advanced/Invention);
B65G21/00 (Core/Invention)
International class (IPC 1-7): B65G15/60
CPC: B65G21/02
European class: B65G21/02
US class: 198/841 198/860.2 198/861.1

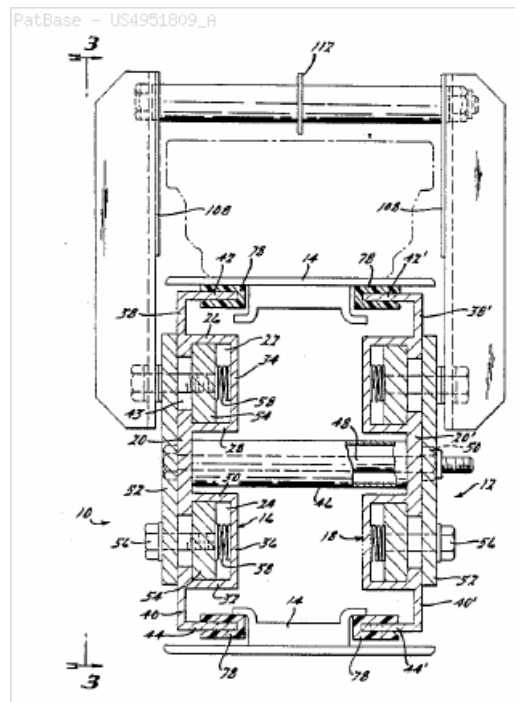
[Classification Explorer](#)

Cited documents: US966488 A, US4727981 A, US4664253 A, US4627529 A, US4556143 A, US4511031 A, US4399908 A, US4274535 A, US4164283 A, US4056180 A, US3944059 A, US3881594 A, US3848732 A, US3835982 A, US3825108 A, US3820650 A, US3800938 A, US3779368 A, US3739904 A, US3669244 A, US3605994 A, US3596752 A, US3367718 A,

Forward Citations: WO9707972, US8925718, US8453830, US7798315, US7757839, US7721418, US7506753, US7322089, US7181832, US7143890, US7137506, US7082677, US6854593, US6848572, US6769536, US6688457, US6619473, US6612426, US6523679, US6510942, US6227355, US6170645, US5797831, US5788056, US5779027, US5605219, US5598784, US5593019, US5426919, US5372247, US5328020, US5265714, US5186314, US5178263, US5156260, US5137145, US5127516, US5125140, US2009277757, US2009277751, US2009188107, US2007034487, US2006107510, US2005155847, US2005056526, US2005044682, US2004211652, US2004187282, US2004177506, US2004177496, US2004094392, EP0713834, DE4308982, AU700202,

Abstract:

An improved conveyor assembly is disclosed which is specifically designed to maximize the use of standardized components yet still afford a maximum degree of flexibility in assembly whereby a wide variety of styles and widths of conveyor chain may be easily and conveniently accommodated. The conveyor assembly of the present invention incorporates standardized lengths of side rails which may be secured together in both end to end as well as side by side relationship so as to accomplish the above objectives. Various arrangements are also disclosed for accomplishing this assembly of components. Further, each of the side rails incorporate a pair of spaced continuous outwardly opening channels which are ideally suited for mounting of any auxiliary equipment desired as well as support for guide strips or the like.



Title: MODULAR CONVEYOR
Priority: US19900634477 19901227 CA19912040838 19910419 CA19912054159 19911024
Family:

Publication number	Publication date	Application number	Application date
CA2040838 AA	19920628	CA19912040838	19910419
CA2040838 C	20030318	CA19912040838	19910419
CA2054159 AA	19920628	CA19912054159	19911024
DE69109836 D1	19950622	DE19916009836	19910830
DE69109836 T2	19951221	DE19916009836T	19910830
EP0492058 A1	19920701	EP19910114655	19910830
EP0492058 B1	19950517	EP19910114655	19910830
ES2075281 T3	19951001	ES19910114655T	19910830
JP5162835 A2	19930629	JP19910352039	19911214
US5131531 A	19920721	US19900634477	19901227

Probable Assignee: DYNAMIC CONVEYOR CORP
Assignee(s):(std): DYNAMIC CONVEYOR CORP ; DYNAMIC KONBEA CORP
Assignee(s): CHAMBERS CURTIS D ; DYNAMIC CONVEYOR CORP MUSKEGON MICH US
Inventor(s):(std): CHAMBERS CURTIS D ; KAACHISU DEII CHIENBAAZU
Inventor(s): CHAMBERS CURTIS D MUSKEGON MICHIGAN US
Agent(s): BORDEN LADNER GERVAIS LLP
Designated states: DE ES FR GB IT
International class (IPC 8-9): B65G15/00 B65G15/24 B65G21/02 B65G21/06 B65G41/00 (Advanced/Invention)
International class (IPC 1-7): B65G15/00 B65G15/24 B65G21/14 B65G21/2 B65G21/6 B65G41/00
CPC: B65G21/02 B65G21/06
European class: B65G21/02 B65G21/06
US class: 198/841 198/860.2 D34/29

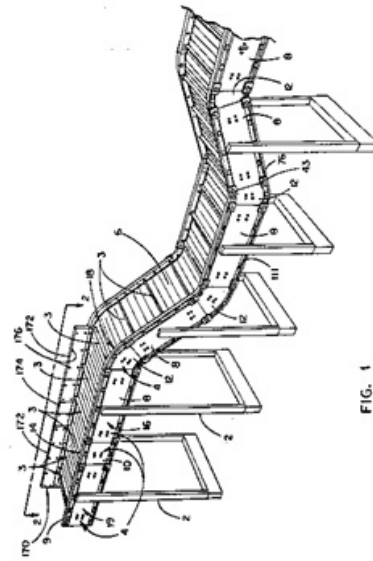
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Cited documents: US4339908 A, US4295561 A, US4172677 A, US4133424 A, US4051948 A, US4013167 A, US3835982 A, US3825108 A, US3456776 A, US2632556 A, US2373839 A, US2222316 A, US2200116 A, US1845066 A, US1527486 A, US1395986 A, JP61075714 A2, JP61033352 A2, JP60136322 A2, JP54177108 A2, GB828449 A, GB2108459 A1, GB1008761 A, FR2061511 A1, DE1254070 B, DD43531 A, CH585140,

Forward Citations: WO9628371, WO16035011, WO15050450, WO15007289, WO14116115, WO07021196, WO06095078, USD755464, USD737077, US9776800, US9555973, US9238550, US8925718, US7721418, US7506753, US7322089, US7222844, US7181832, US7143890, US7137506, US7082677, US7048112, US7048111, US6913139, US6742778, US6520321, US6427831, US6296111, US6220590, US6017028, US6009994, US5924551, US5713452, US5595283, US2015136571, US2014251768, US2012067257, US2010213032, US2007034487, US2006107510, US2005155847, US2005056526, US2005044682, US2005029078, US2004238334, US2004187282, US2004177506, US2003184006, US2002088690, KR101759162, KR101449362, FR2885360, FR2882738, FR2882737, FR2784974, ES2470493, EP1855965, EP1301421, EP1301421, EP0997403, DE10227645, DE10227645, AU2012261746,

Abstract:

A modular conveyor is defined by a belt-supporting frame (4), leg supports (2) for supporting the frame (4), and a continuous conveyor belt (6) supported and guided by the frame (4) for continuous movement. The modular conveyor is improved by providing the frame (4) with a plurality of modular frame assemblies (16) and connector assemblies (14, 18) for joining the modular frame assemblies (16) end to end to form conveyors of different size and shape wherein the connector assemblies (14, 18) and modular frame assemblies (16) are joined end to end in alternating relationship. The connector assemblies (14, 18) comprise straight connector assemblies (14) for extending the conveyor along a linear path and angular connector assemblies (18) for extending the conveyor along an angular path with respect to a preceding modular frame assembly (16). The angular connector assemblies (18) can be used to extend the conveyor along an upward direction or along a downward direction. Each of the modular frame assemblies (16) comprises at least one frame member (8) with a belt guide channel (124) to guide an edge of the belt (6), at least one cross member (26) attached to the frame member (8) and belt supports (100) on the cross members (26). The modular frame assemblies (16) are preferably made of synthetic plastic resin.



Title: MODULAR PLASTIC TURN BELT CONVEYOR SYSTEM, MODULE, BELT AND DRIVE THEREFOR
Priority: US19910725432 19910703 CA19922072910 19920702

Family:	Publication number	Publication date	Application number	Application date
	AT160997 E	19971215	AT19920111234T	19920702
	CA2072910 AA	19930104	CA19922072910D	19920702
	CA2072910 C	19951003	CA19922072910	19920702
	DE69223458 D1	19980122	DE19926023458	19920702
	DE69223458 T2	19980402	DE19926023458T	19920702
	DK0521506 T3	19980824	DK19920111234T	19920702
	EP0521506 A2	19930107	EP19920111234	19920702
	EP0521506 A3	19931118	EP19920111234	19920702
	EP0521506 B1	19971210	EP19920111234	19920702
	JP2804681 B2	19980930	JP19920172353	19920630
	JP6092426 A2	19940405	JP19920172353	19920630
	US5174439 A	19921229	US19910725432	19910703

Probable Assignee: REGINA EMERSON CO

Assignee(s):(std): CAMBRIDGE WIRE CLOTH ; EMERSON CHAIN INC ; QUEEN R LTD

Assignee(s): REGINA EMERSON CO ; QUEEN R LIMITED ; QUEEN R LTD WAUKESHA WIS US ; SPANGLER MICHAEL L ; EMERSON CHAIN INC ITHACA N Y US ; PERDUE THOMAS O ; CAMBRIDGE WIRE CLOTH CO ; CAMBRIDGE WIRE CLOTH COMPANY ; CAMBRIDGE INC

Inventor(s):(std): TOOMASU OO PAADYU ; MAIKERU ERU SUPANGAA ; SPANGLER MICHAEL L ; PERDUE THOMAS O

Agent(s): RIDOUT AND MAYBEE LLP

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

International class (IPC 8-9): B65G15/32 B65G17/06 B65G17/08 B65G17/38 B65G17/40 (Advanced/Invention)

International class (IPC 1-7): B65G15/32 B65G17/06 B65G17/08 B65G17/38 B65G17/40

CPC: B65G17/086 B65G2201/02 B65G2207/12

European class: B65G17/08D L65G201/02 L65G207/12

US class: 198/834 198/850 198/852 198/853

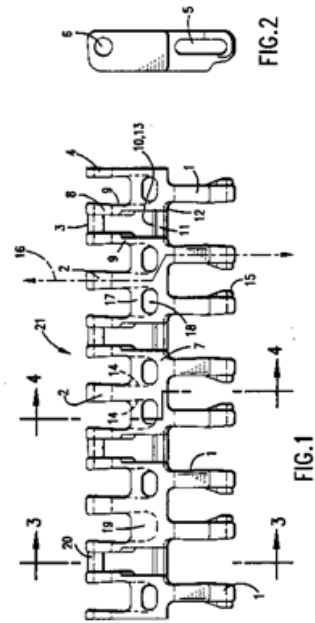
[Classification Explorer](#)

Cited documents: WO9008080 A1, US4934517 A, US4901844 A, US4893710 A, US4742907 A, US4557374 A, JP63258306 A2, JP62074816 A2, JP59004505 A2, JP57061050 U1, JP57049812 U1, JP53133877 A2, JP4064504 A2, JP35026223 Y1, JP3018505 A2,

Forward Citations: WO9965801, WO9926869, WO9747539, WO9702198, WO16126577, WO16124541, WO16124540, WO16033292, WO15067274, WO14135724, WO11067737, WO08151227, WO08057449, WO05080234, WO05080233, WO04007320, WO03093147, WO03093147, WO0043299, WO0035786, USRE42361, USD420777, USD420483, US9751694, US9573767, US9555972, US9475645, US9409721, US9102476, US9085414, US9016467, US8925718, US7837028, US7690501, US7494005, US7377380, US7367447, US7364036, US7281626, US7159709, US7070043, US6910572, US6896126, US6837367, US6793069, US6732856, US6672451, US6615979, US6564933, US6523680, US6474464, US6471048, US6357581, US6330941, US6305530, US6223889, US6041917, US5921379, US5906270, US5899322, US5690210, US5678683, US5558208, US5547071, US5431275, US5423416, US5372248, US5224583, US2011062001, US2009266682, US2009011885, US2008217142, US2008105519, US2007181408, US2007119692, US2007080048, US2005241922, US2004184889, US2004149548, NL1020520, KR101253562, KR101112168, JP5005348, JP4378054, JP2951316, JP2016516649, JP2013151332, JP2011513157, JP2011507780, JP2009514761, JP2007510605, JP2002518270, JP11334834, ITBO20090784, FR2841882, EP2342149, EP1519885, EP1499544, EP1182151, EP0907591, EP0663354, CN105164029, CN102310986, CN102310986, AU679292,

Abstract:

A modular plastic turn belt has internal modules with link ends of varying shapes, a central body formed for high stiffness, large open area, and light-weight construction. Special edge modules with closer link end spacing and tapered pivot rod slots provide improved edge strength, load distribution, and collapsibility. A bi-directional pitch line drive from both surfaces is provided by a symmetrical drive barrel. Unique hold down arrangements, traction improved constructions, and rod retention arrangements are disclosed.



Title: Modular track section for an endless conveyor

Priority: US19910799256 19911127

Family:

Publication number	Publication date	Application number	Application date
US5178263 A	19930112	US19910799256	19911127

Probable Assignee: EVERGREEN PACKAGING INC

Assignee(s):(std): INT PAPER CO

Assignee(s): INT PAPER CO A OF NEW YORK CORP ; INTERNATIONAL PAPER COMPANY ; BANK OF NEW YORK MELLON AS COLLATERAL AGENT ; BANK OF NEW YORK MELLON COLLATERAL AGENT AS ; CREDIT SUISSE SYDNEY BRANCH AS SECURITY AGENT ; CREDIT SUISSE SYDNEY BRANCH SECURITY AGENT AS ; EVERGREEN PACKAGING INC

Inventor(s):(std): KEMPEN BYRON J

International class (IPC 8-9): B65G21/02 B65G21/20 (Advanced/Invention); B65G21/00 B65G21/20 (Core/Invention)

International class (IPC 1-7): B65G15/60

CPC: B65G21/02 B65G21/2072

European class: B65G21/02 B65G21/20D2B

US class: 198/836.1 198/841 198/860.2 198/860.3 198/861.1

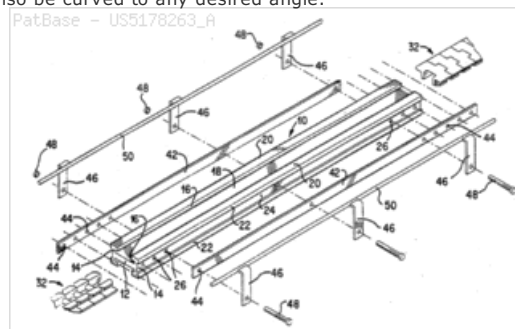
[Classification Explorer](#)

Cited documents: US5082108 A, US4967897 A, US4961492 A, US4951809 A, US4934516 A, US4856656 A, US4732268 A, US4664253 A, US4556143 A, US4545477 A, US4535963 A, US4511031 A, US4358010 A, US3881594 A, US3825108 A, US3605994 A, US3581877 A, US3312330 A, US1854560 A, GB2069442 A1, DE3231868 A1,

Forward Citations: WO9728073, WO16035011, WO12059101, WO02086240, US9110773, US8925718, US8851277, US8562241, US7997405, US7506753, US7156605, US7137506, US7128201, US7128201, US7082677, US7048112, US6830146, US6619473, US6612426, US6591979, US6581759, US6543609, US6427831, US6401907, US6296111, US6202834, US5924551, US5715931, US5598784, US2013180833, US2010296860, US2007034487, US2006096844, US2005155847, US2005029078, US2004262130, US2004177496, US2003221939, GB2291847, FR2706162, EP1118559, EP1075441, EP0713834, EP0630834, CN103189288, CN103189288, AU2011325561,

Abstract:

An endless chain conveyor system employing modular track units. The track is of a ultra high molecular weight plastic and is of generally horizontal I-shape in transverse cross section. Each side of the track includes a longitudinal slot running the entire, predetermined length of each modular track. Side mounting rails of stainless steel are positioned within each slot. The side rails rigidify and strengthen the plastic track, permitting a smaller cross section track to be used, and also inhibit tearing of the track units of their joined ends. The track units are made of predetermined lengths, such as one foot, two feet, etc., and are used to construct endless conveyors of any desired length. The track units may also be curved to any desired angle.

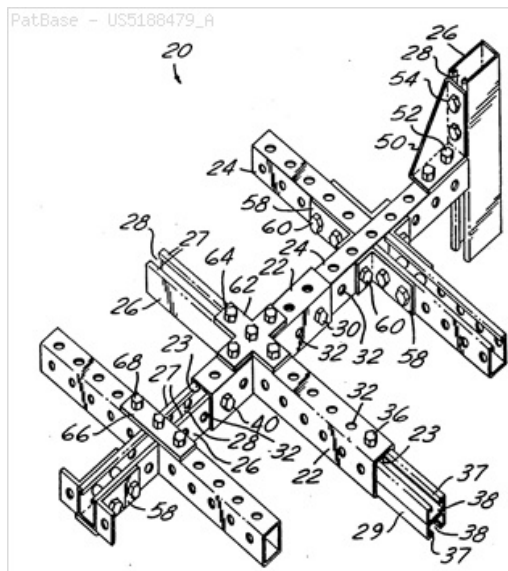


Title: TUBULAR FRAMING SYSTEM**Priority:** US19920876248 19920430 WO1993US00506 19930121 US19930006561 19930121
CA19932088857 19930205

Family:	Publication number	Publication date	Application number	Application date
	AT201758 E	20010615	AT19930903601T	19930121
	AU199334805 A1	19931129	AU19930034805	19930121
	AU687729 B2	19980305	AU19930034805	19930121
	CA2088857 AA	19931031	CA19932088857	19930205
	CA2088857 C	20040817	CA19932088857	19930205
	DE69330273 D1	20010705	DE19936030273	19930121
	DE69330273 T2	20020418	DE19936030273T	19930121
	EP0640197 A1	19950301	EP19930903601	19930121
	EP0640197 A4	19950809	EP19930903601	19930121
	EP0640197 B1	20010530	EP19930903601	19930121
	HK1013679 A1	20011109	HK19980115035	19981223
	MX9300828 A1	19931001	MX19930000828	19930216
	US5188479 A	19930223	US19920876248	19920430
	US5297888 A	19940329	US19930006561	19930121
	WO9322597 A1	19931111	WO1993US00506	19930121

Probable Assignee: UNISTRUT INT CORP**Assignee(s):(std):** UNISTRUT CORP ; UNISTRUT INT CORP ; NEHLS CHARLES OLEN**Assignee(s):** UBS STAMFORD BRANCH AG ; UNISTRUT INT CORP ANN ARBOR ; WILMINGTON TRUST FSB**Inventor(s):(std):** NEHLS CHARLES O ; NEHLS CHARLES OLEN ; NEHLS OLEN**Inventor(s):** CHARLES O NEHLS ; CHARLES OLEN NEHLS**Agent(s):** PHILLIPS ORMONDE FITZPATRICK; R WILLIAM WRAY AND ASSOCIATES**Designated states:** AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LK
LU MC MG ML MN MR MW NL NO NZ PL PT RO RU SD SE SK SN TD TG US**International class** A47B47/02 E04B1/24 F16B19/10 (Advanced/Invention);
(IPC 8-9): E04B1/24 F16B19/04 (Core/Invention)**International class** A47B47/02 A47B57/06 A47B57/18 A47B57/44 A47F5/00 B25G3/00 E04G7/00 F16B F16B12/32 F16B7/00
(IPC 1-7): F16S F16S3/00 F16S3/08**CPC:** Y10T403/57 Y10T403/5741 Y10T403/7043 F16B19/1081 E04B1/2403 E04B2001/2415 E04B2001/2418
E04B2001/2421 E04B2001/2454 E04B2001/2469**European class:** E04B1/24B F16B19/10B2D P04B1/24B4 P04B1/24B42 P04B1/24B5 P04B1/24B6 P04B1/24C2**US class:** 403/300 403/306 403/363[Classification Explorer](#)**Cited documents:** US5116161 A, US4784552 A, US4662532 A, US4261470 A, US4069638 A, US3511000 A, US3462021 A,
US2737268 A, US1895259 A, US1859259 A, US1850118 A, GB2060116 A1, FR1386323 A, CA699696 A,
AU2875089 A1, AU2369653 A1,**Forward Citations:** WO02103129, WO0066442, USD805881, USD805375, US9777908, US8925718, US8562241, US8550757,
US8408853, US8371198, US7976256, US7874774, US7594787, US7562951, US7547170, US7390154,
US7281889, US7175377, US7070374, US6883277, US6846140, US6712568, US6572303, US6375135,
US6062396, US5921334, US2016084286, US2015276092, US2014112706, US2011041664,
US2010296860, US2010294906, US2009246741, US2009080995, US2008279649, US2008229699,
US2008219795, US2008213061, US2007036628, US2006045648, US2005204694, US2005145662,
US2005117991, US2005074308, US2005034378, US2004131440, ITVA20130018, FR2838355,**Abstract:**

A versatile framing system incorporates open channel members and closed tubular members. The closed tubular members provide strength, while the open channel member allows various members to be attached at an infinite number of positions along its length. The inventive system thus successfully incorporates the advantages of both open channel members and closed tubular members.

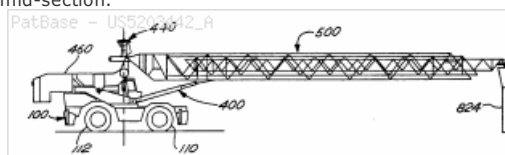


Title: CANTILEVER CONVEYING TECHNIQUES**Priority:** US19910693914 19910429

Family:	Publication number	Publication date	Application number	Application date
	US5203442 A	19930420	US19910693914	19910429

Probable Assignee: ROTEC IND**Assignee(s):(std):** ROTEC IND ; ROTEC INDUSTRIES**Assignee(s):** ROTEC INDUSTRIES INC ; ROTEC IND INC**Inventor(s):(std):** LEDGER A STEVEN ; OURY ROBERT F**International class (IPC 8-9):** B28C5/42 B65G21/14 E04G21/04 (Advanced/Invention);
B28C5/00 B65G21/00 E04G21/04 (Core/Invention)**International class (IPC 1-7):** B65G15/26**CPC:** E04G21/0409 B65G21/14 B28C5/4255 E04G21/04**European class:** B28C5/42A3C3 B65G21/14 E04G21/04**US class:** 198/313 198/316.1 198/812[Classification Explorer](#)**Cited documents:** USRE29110 E, US4624357 A, US4523669 A, US4345680 A, US3945484 A, US3825107 A, US3675762 A, US3613866 A, US3402805 A, NL8105476 A, CH664342 A,**Forward Citations:** WO9738926, USRE45867, US9957108, US9807997, US9643789, US9499348, US9428348, US9409714, US9334124, US8925718, US8919526, US8864240, US8506232, US8241098, US7909153, US7806757, US7784597, US7455173, US7448486, US7354235, US6929113, US6805229, US6782993, US6378686, US6360876, US5498119, US5487462, US5423413, US5351809, US2017086449, US2015336747, US2014251768, US2013087437, US2012067184, US2010135758, US2010016047, US2009294246, US2009071797, US2007029170, US2006228198, US2005211534, US2004031662, FR2868056, EP1582483, CN104947675, CN104947675,**Abstract:**

A self-propelled vehicle mounting a cantilevered conveyor truss for concrete and the like. An improved force balancing frame enables the vehicle to remain stable even though the truss conveyor is extended to maximum length and elevated to a high angle. Improved geometry enables the truss conveyor to be pivoted at a point above a cab mounted on a turntable of the vehicle and forward of the axis of rotation of the turntable, thereby facilitating the deposit of concrete on the conveyor. Polyethylene pads control the motion of the truss conveyors, especially when the truss conveyor is elevated to a high angle. A unique drive assembly enables a mid-section and fly section of the truss conveyor to be moved simultaneously with respect to a base section of truss conveyor such that the fly section moves at twice the rate of the mid-section.

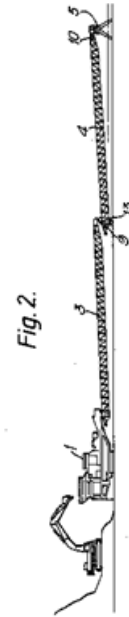
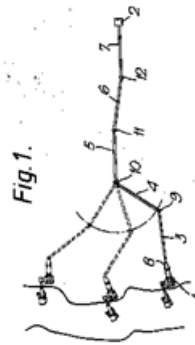


Title: Conveyor system
Priority: FI19920002557 19920603 CA19932097571 19930602
Family:

Publication number	Publication date	Application number	Application date
■ AT149961 E	19970315	AT19930304240T	19930601
■ AU199340030 A1	19931209	AU19930040030	19930603
■ AU666730 B2	19960222	AU19930040030	19930603
■ CA2097571 AA	19931204	CA19932097571	19930602
■ CA2097571 C	20040217	CA19932097571	19930602
■ DE69308641 D1	19970417	DE19936008641	19930601
■ DE69308641 T2	19970904	DE19936008641T	19930601
■ EP0573255 A1	19931208	EP19930304240	19930601
■ EP0573255 B1	19970312	EP19930304240	19930601
■ ES2098664 T3	19970501	ES19930304240T	19930601
■ FI922557 A	19931204	FI19920002557	19920603
■ FI922557 A0	19920603	FI19920002557	19920603
■ FI98505 B	19970327	FI19920002557	19920603
■ FI98505 C	19970710	FI19920002557	19920603
■ JP3561844 B2	20040902	JP19930157893	19930603
■ JP6056241 A2	19940301	JP19930157893	19930603
■ NO306207 B1	19991004	NO19930002012	19930602
■ NO932012 A	19931206	NO19930002012	19930602
■ NO932012 A0	19930602	NO19930002012	19930602
■ US5377810 A	19950103	US19930070219	19930602

Probable Assignee: METSO MINERALS TAMPERE OY
Assignee(s):(std): LOKOMO OY ; NORDBERG LOKOMO OY ; NORBERG LOKOMO OY ; ROKOMO OY
Assignee(s): KEMPAS JORMA ; LEHTONEN HARRI ; M O MINERALS OY PL ETS ; LOKOMO OY PL ; NORDBERG LOKOMO OY BOX ; METSO MINERALS OY ; METSO MINERALS TAMPERE OY ; NORDBERG LOKOMO OY TAMPERE FI
Inventor(s):(std): HARI REETONEN ; JIYORUMA KENPASU ; KEMPAS JORMA ; LEHTONEN HARRI
Inventor(s): LEHTONEN HARRI SF 33900 TAMPERE FI ; KEMPAS JORMA SF 33720 TAMPERE FI ; JORMA KEMPAS ; HARRI LEHTONEN
Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP
Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
International class (IPC 8-9): B65G15/22 B65G15/24 B65G21/14 B65G41/00 B65G47/52 B65G63/04 (Advanced/Invention); B65G47/52 (Advanced/Non-invention); B65G15/00 B65G21/00 B65G41/00 B65G47/52 B65G63/00 (Core/Invention)
International class (IPC 1-7): B65G15/22 B65G15/24 B65G19/08 B65G21/14 B65G25/10 B65G37/00 B65G41/00 B65G47/52 B65G63/04 E21F13/08
CPC: B65G21/14 B65G41/008 B65G63/047 B65G65/28
European class: B65G21/14 B65G41/00D2 B65G63/04B B65G65/28
US class: 198/303
[Classification Explorer](#)
Cited documents: US5234094 A, US4646906 A, US3279584 A, US3031214 A, US2923398 A, US2780451 A, US2674364 A, GB1090689 A, FI235235 A, DE3725595 A1, DE3435328 A1, DE3040795 A1, DE2719412 A1, DE2702174 A1, DE1090615 B, AU412155 B2,
Forward Citations: WO14076313, WO14076313, WO10037215, US9016799, US8925718, US8317116, US8025341, US8016216, US7284650, US6820733, US6588572, US6085890, US5573363, US2013118862, US2012062016, US2009133987, US2004222064, RU2602156, RU2504658, RU2504658, JP8128139, JP2840199, EP2342422, CN102203380, AU2009299081,

Abstract:
The invention relates to a conveyor system, which has several conveyors (3/4) joined to together into a chain. There is an articulation (9) at the joining point of the conveyors, which allows the conveyors to turn relative to each other. The chain may be formed and disassembled rapidly. The system is applicable to be used e.g. at mines.



Title: Conveyor construction
Priority: US19940204738 19940302 US19940352584 19941209
Family:

	Publication number	Publication date	Application number	Application date
	US5421451 A	19950606	US19940204738	19940302
	US5509767 A	19960423	US19940352584	19941209

Probable Assignee: ALVEY SYSTEMS INC

Assignee(s):(std): ALVEY INC

Assignee(s): ALVEY SYSTEMS INC ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; FKI LOGISTEX INC ; NATIONSBANK NA AS AGENT ; INTELLIGRATED SYSTEMS INC ; INTELLIGRATED INC ; NEXBANK SSB AS COLLATERAL AGENT ; INTELLIGRATED HEADQUARTERS LLC ; NATIONSBANK NA AGENT AS ; GENERAL CORP IND ; INTELLIGRATED HOLDINGS INC ; INTELLIGRATED PRODUCTS LLC ; INTELLIGRATED SYSTEMS LLC ; WELLS FARGO FOOTHILL LLC AS AGENT ; NEXBANK SSB COLLATERAL AGENT AS ; WELLS FARGO FOOTHILL LLC AGENT AS ; ROYAL BANK OF CANADA FIRST LIEN COLLATERAL AGENT A ; ROYAL BANK OF CANADA SECOND LIEN COLLATERAL AGENT ; ROYAL BANK OF CANADA FIRST LIEN COLLATERAL AGENT AS ; ROYAL BANK OF CANADA SECOND LIEN COLLATERAL AGENT AS

Inventor(s):(std): EASTON RICHARD L

International class
(IPC 8-9): B65G21/06 F16B35/04 (Advanced/Invention);
B65G21/00 F16B35/04 (Core/Invention)

International class
(IPC 1-7): B65G21/00 F16B23/00 F16B45/00

CPC: B65G21/06 F16B35/044

European class: B65G21/06 F16B35/04B2

US class: 198/860.1 198/861.1 411/400 411/401 411/485

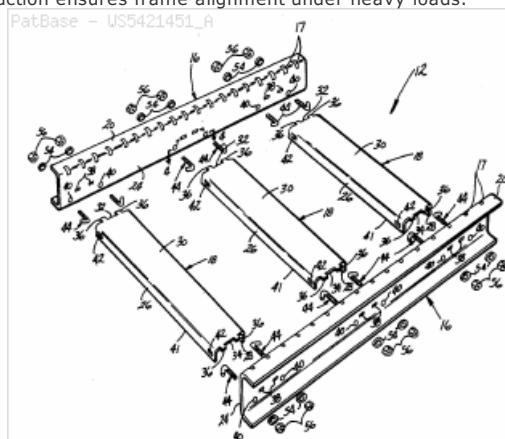
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Cited documents: US501052 A, US4930623 A, US4926953 A, US4372522 A, US4068856 A, US3463525 A, US3303735 A, US3075622 A, US2801730 A, US2379752 A, US2117717 A, US1939034 A, IT509761 A, GB774778 A,

Forward Citations: WO15112782, WO11113517, WO06115513, WO05054690, US9914591, US9839204, US9682824, US9527672, US8925718, US8684171, US8663023, US8282497, US8251832, US8235203, US8210954, US8197352, US8162769, US8096892, US8079916, US8075413, US8070615, US7997405, US7942752, US7921601, US7857704, US7837030, US7828667, US7815514, US7811177, US7810636, US7785207, US7780536, US7775896, US7775895, US7775894, US7766753, US7762900, US7762899, US7758435, US7740542, US7735638, US7727077, US7597630, US7546916, US7497784, US7114615, US7114615, US6619473, US6510942, US6427831, US5797831, US5529171, US2016229636, US2015237835, US2014251768, US2011100786, US2010072033, US2009250326, US2008217139, US2008210529, US2007197304, US2007087850, US2007066410, US2007060404, US2007054745, US2007051038, US2007051036, US2007033868, US2006237293, US2006178222, US2006052171, ITRM20110255, EP0909727, DE19741663, DE19741663, CN105939945,

Abstract:

A conveyor comprises parallel side frames provided with a plurality of apertures and C-shaped cross members provided with apertures in the side walls disposed in juxtaposition to apertures in the side frames. The cross member apertures are each defined by a flat inner wall. The cross members are fastened to the side frames by hook-bolts having a hook portion extending through the side wall apertures and a shaft extending to a juxtaposed aperture in the side frame and provided with a nut and washer to secure the bolt in the side frame. The hook portion of the bolt is provided with a flat surface extending a substantial distance across the inner surface of the bolt to provide a load bearing contact area with the inner wall of the side member aperture. The cross members have tabs extending outwardly from each end which are inserted into complementary apertures in the side frames. The resulting bolted conveyor frame construction ensures frame alignment under heavy loads.



Title: Extruded aluminum conveyor with track offset
Priority: US19940346222 19941122 CA19952163140 19951117 PL19950103940U 19951221
Family:

Publication number	Publication date	Application number	Application date
AR000169 AA	19970521	AR19950334305	19951121
AU199537977 A1	19960530	AU19950037977	19951121
AU700202 B2	19981224	AU19950037977	19951121
BRPI9505267 A	19970916	BR1995PI05267	19951122
CA2163140 AA	19960523	CA19952163140	19951117
CN1064635 C	20010418	CN19951017591	19951121
CN1128236 A	19960807	CN19951017591	19951121
CZ9503075 A3	19970917	CZ19950003075	19951122
DE69510305 D1	19990722	DE19956010305	19951030
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EP0713834 A2	19960529	EP19950117064	19951030
EP0713834 A3	19961106	EP19950117064	19951030
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ES2134395 T3	19991001	ES19950117064T	19951030
FI955600 A	19960523	FI19950005600	19951121
FI955600 A0	19951121	FI19950005600	19951121
HK1013976 A1	20000609	HK19980115400	19981224
HU218798 B	20001228	HU19950003317	19951121
HU74661 A2	19970128	HU19950003317	19951121
HU9503317 A0	19960129	HU19950003317	19951121
JP8337165 A2	19961224	JP19950328232	19951122
KR100270890 B1	20001101	KR19950042758	19951122
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NZ280508 A	19980226	NZ19950280508	19951121
PL103940 U1	19960624	PL19950103940U	19951221
PL177726 B1	20000131	PL19950311447	19951122
PL311447 A1	19960527	PL19950311447	19951122
PL57851 Y1	20000428	PL19950103940U	19951221
RU2152344 C1	20000710	RU19950120248	19951122
RU95120248 A	19971027	RU19950120248	19951122
SG38887 A1	19970417	SG19950001885	19951121
TH22242 A	19961211	TH19951002936	19951120
TW296989 B	19970201	TW19950112556	19951124
US5598784 A	19970204	US19940346222	19941122
ZA9509851 A	19970526	ZA19950009851	19951121

Probable Assignee: JERVIS B WEBB CO

Assignee(s):(std): DZHERVIS B VEBB INTERNEJSHNL K ; DZHERVIS B VEBB INTERNEJSHNL KOMPANI ; JERVIS B WEBB COMPANY ; JERVIS B WEBB INTERNAT CO ; JERVIS B WEBB INT CO ; WEBB CO JERVIS B ; WEBB INT CO JERVIS B ; WEBB INT CO JERVIS B

Assignee(s): KUBSIK ROBERT ; NEMETH ERIC T ; JERVIS B WEBB INTERNATIONAL COMPANY ; JERVIS B WEBB INTERNATIONAL CO FARMINGTON HILLS MICH US ; JOHNSON JAMES P ; JERVIS B WEBB INTERNATIONAL COUS ; JERVIS BWEBB INT CO ; JERVIS B WEBB INTERNATIONAL CO FARMINGTON HILLS MI ; JERVIS B WEBB INTERNATIONAL CO FARMINGTON HILLS ; GORYCA ROBERT ; JERVIS B WEBB CO ; JERVIS B WEBB INTERNATL CO ; BANK ONE NA ; CONGRESS FINANCIAL CORP

Inventor(s):(std): BORYCA R ; DZHONSON DZHEJMS P ; ERIC T NEMETH ; ERITSUKU TEE NEMESU ; GORIKA ROBERT ; GORYCA ROBERT ; GORYCA ROBERT ALLAN ; GORYCA ROBERTO ; JAMES P JOHNSON ; JIEEMUSU PII JIYONSON ; JOHNSON JAMES ; JOHNSON JAMES P ; JOHNSON JAMES PERRY ; KUBSIK ROBERT ; KUBSIK ROBERT HENRY ; NEMET EHRIC T ; NEMETH E ; NEMETH ERIC T ; NEMETH ERIC THOMAS ; ROBAATO GORIKA ; ROBAATO KABUSHIKU ; ROBERT GORYCA ; ROBERT KUBSIK

Inventor(s): ROBERTO GORYCA ; Robert ; NEMETH ERIC T PINCKNEY MI 48331 US ; KUBSIK ROBERT WEST BLOOMFIELD MI 48331 US ; Kubsik ; JOHNSON JAMES P HOWELL MI 48843 US ; Johnson ; James P. ; GORYCA ROBERT FARMINGTON HILLS MI 48336 US ; Goryca ; etc.

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; RIDOUT AND MAYBEE LLP

Designated states: DE ES FR GB IT SE

International class (IPC 8-9): B61B10/02 B61B12/00 B62D65/00 B65G17/00 B65G17/20 B65G19/28 B65G21/06 B65G21/20 B65G21/22 B65G35/00 E01B25/24 (Advanced/Invention); B62D65/00 B65G17/00 B65G17/20 B65G21/00 (Advanced/Non-invention); B61B10/00 B62D65/00 B65G17/00 B65G17/20 B65G19/00 B65G21/00 B65G21/20 E01B25/00 (Core/Invention); B65G21/20 B65G35/00 (Core/Non-invention)

International class (IPC 1-7): B21C23/00 B61B10/02 B61B12/00 B62D65/00 B65G B65G13/00 B65G15/28 B65G17/00 B65G17/10 B65G17/20 B65G17/24 B65G19/28 B65G21/00 B65G21/06 B65G21/10 B65G21/20 B65G21/22 B65G21/6 B65G35/00 B65G39/00 B65G41/00 B66C11/00 B66C7/00 E01B E01B25/22 E01B25/24 E01B29/02

CPC: B65G21/06

European class: B65G21/06

US class: 104/107 104/111 104/172.4 198/836.4 198/838

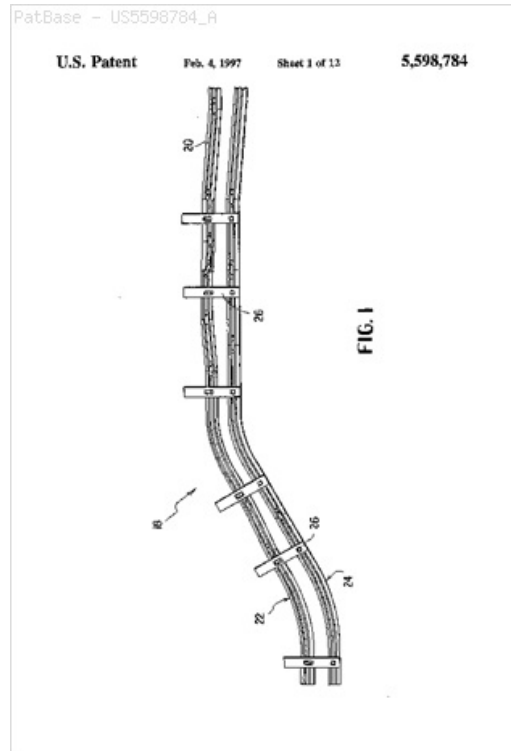
[Classification Explorer](#)

Cited documents: US5355805 A, US5178263 A, US5137145 A, US5012746 A, US4951809 A, US4838412 A, US4811829 A, US4762069 A, US4733771 A, US4694531 A, US4646905 A, US4467914 A, US4420075 A, US4157751 A, US3830165 A, US3559585 A, US2784813 A, FR2553123 A1, FR1201830 A, EP0206972 A2, DE4015970 A1, DE1966371 B2,

Forward Citations: WO12146424, WO11060560, WO11060560, WO08123335, WO05080235, WO05080235, US9829025, US9776836, US9676597, US9290328, US9067739, US8966858, US8925718, US8850635, US8627943, US8458827, US8167121, US8051976, US7921989, US6715411, US6283038, US6269944, US6237755, US5960938, US5957057, US5768998, US2017191514, US2014353120, US2013269565, US2013164078, US2013001051, US2012168277, US2012110939, US2011265260, US2009314614, US2009260457, EP2942319, EP1723059, EP1031529, EA11660, EA011660, DE102005006097, DE10027730, CN105460483, CN104735992, CN103818681, CN103502119, CN103502119, CN102756902, CN102756902, CN102596764, CN102596764, CH710024, CH702278,

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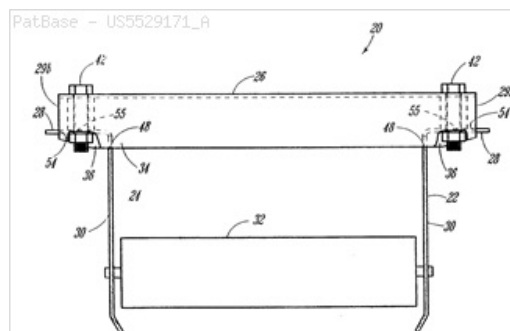
An improved conveyor track system is provided wherein the track segments are provided with longitudinal channels of T-shaped cross-section which are offset from the centerline of the track and which accept rectangular splice bars that are used to secure the track segments together. The system is provided with a series of yokes which are connected to the track segments by means of bolts and rectangular connectors disposed in the longitudinal channels of the track segments, and whose position on the track segments is adjustable in both a horizontal and vertical direction.



Title:	Modular frame assembly for industrial conveyors and the like					
Priority:	US19950401879 19950310		US19950437092 19950505		WO1996US03055 19960306	
Family:	Publication number	Publication date	Application number	Application date		
	AU199651845 A1	19961002	AU19960051845	19960306		
	BRPI9607366 A	19971230	BR1996PI07366	19960306		
	CA2214986 AA	19970909	CA19962214986	19960306		
	CN1183086 A	19980527	CN19961093553	19960306		
	EP0813493 A1	19971229	EP19960908680	19960306		
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	KR19980702912 A	19980905	KR19970706320	19960306		
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	US5715931 A	19980210	US19950401879	19950310		
	WO9628371 A1	19960919	WO1996US03055	19960306		
	Probable Assignee:	HEALD JULIE L				
	Assignee(s):(std):	LANGENBECK KEITH ; LANGENBECK KEITH A				
Assignee(s):	HEALD JULIE L ; KEITH A LANGENBECK					
Inventor(s):(std):	KEITH A LANGENBECK ; LANGENBECK KEITH A					
Agent(s):	MOFFAT AND CO					
Designated states:	AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LR LS LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UG UZ VN					
International class (IPC 8-9):	B65G21/02 B65G21/20 (Advanced/Invention); B65G21/00 (Core/Invention)					
International class (IPC 1-7):	B65G21/00 B65G21/02 B65G21/20					
CPC:	B65G21/02					
European class:	B65G21/02					
US class:	198/860.1 198/860.2 198/861.1					
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Abstract:

Modular frame assemblies are made up of longitudinal beam members which may be angle or channel-shaped members having slots which intersect the flanges and legs or flanges and web portions of the longitudinal beam members. Transverse beam members extend between the longitudinal beam members and have flange portions which extend into the slots. The transverse beam members may be secured to the longitudinal beam members by conventional mechanical bolt assemblies, for example. In one embodiment, the slots in the longitudinal beam members have inwardly tapering surfaces which effect elastic deflection of the flanges of the transverse beam members to precisely locate the longitudinal beam members relative to each other and to the transverse beam members. In another embodiment, the slots in the longitudinal beam members are somewhat L-shaped and permit extension of the flange of the transverse beam member into a position to engage a flange of the longitudinal beam members, respectively, to be secured to each other by mechanical fasteners and to be located relative to the longitudinal beam members by opposed transverse surfaces on the transverse beam members. Another embodiment includes transverse channel shaped beams which have opposed distal web portions secured to the longitudinal beams and transverse edges of the channel shaped beams about the legs or webs of the longitudinal beams.

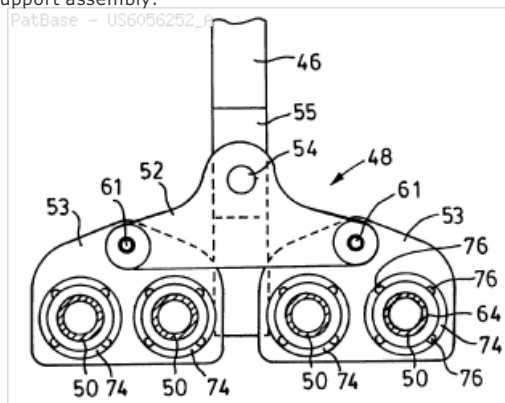


Title: Support assembly for telescopic conveyor system**Priority:** US19970979362 19971126

Family:	Publication number	Publication date	Application number	Application date
	US6056252 A	20000502	US19970979362	19971126

Probable Assignee: THOR STEEL AND WELDING LTD**Assignee(s):(std):** THOR STEEL AND WELDING LTD**Inventor(s):(std):** JOHANSEN THORKIL J**International class**
(IPC 8-9): B65G21/14 (Advanced/Invention);
B65G21/00 (Core/Invention)**International class**
(IPC 1-7): F16M11/24**CPC:** B65G21/14**European class:** B65G21/14**US class:** 198/812 212/350 248/188.3 52/118[Classification Explorer](#)**Cited documents:** US5669562 A, US5487462 A, US5351809 A, US4679652 A, US4406361 A, US4090625 A, US3874136 A, US3825107 A, US3788452 A, US3722477 A, US3687276 A, US3613866 A, US3552546 A, US3378125 A, US3341029 A, US3093248 A, US2938614 A,**Forward Citations:** US9598240, US8925718, US7849641, US7784597, US7513370, US7455173, US7448486, US7354235, US6929113, US6805229, US6360876, US2014251768, US2011126700, US2009071797, US2009013617, US2008023375, US2007029170, US2006228198, US2004031662, GB2481891, GB2481891,**Abstract:**

A support assembly for supporting an extendable frame that is telescopically mounted on a base frame. The support assembly includes a number of support rollers for supporting the extendable frame. The support rollers are supported by lever devices such that the load applied by the extendable frame on the support rollers is proportionately distributed over all of the support rollers. The lever device includes a pivot plate device pivotally mounted to the base frame to pivot about a primary pivot axis. At least two support rollers are connected to the pivot plate to rotate about rotational axes located on opposite sides of the primary pivot axis. Also provided is a telescopic conveyor system having such a support assembly.



Title:

Fold-over conveyor assembly

Priority:

US20000510874 20000222

Family:

Publication number	Publication date	Application number	Application date
US6302265 BA	20011016	US20000510874	20000222

Probable Assignee:

CMI TEREX CORP

Assignee(s):(std):

CMI CORP

Assignee(s):

CMI TEREX CORP ; CREDIT SUISSE COLLATERAL AGENT AS ; CREDIT SUISSE CAYMAN ISLANDS BRANCH COLLATERAL AGE ; GENIE IND INC ; TEREX ADVANCE MIXER INC ; TEREX CORP ; TEREX CRANES WILMINGTON INC ; TEREX TELELECT INC ; TEREX USA LLC ; CREDIT SUISSE CAYMAN ISLANDS BRANCH COLLATERAL AGENT AG AS ; AMIDA IND INC ; ASV INC

Inventor(s):(std):

CUNNINGHAM JOHN

International class (IPC 8-9):

B65G21/14 B65G41/00 (Advanced/Invention);
B65G21/00 B65G41/00 (Core/Invention)

International class (IPC 1-7):

B65G21/10

CPC:

B65G21/14 B65G41/002

European class:

B65G21/14 B65G41/00A2

US class:

198/313 198/632 198/861.3

Classification Explorer

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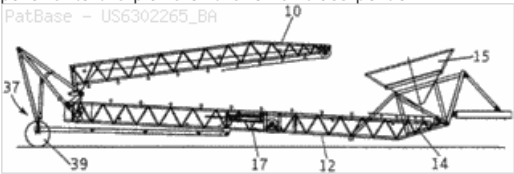
US6129196 A, US5443351 A, US5333725 A, US4427104 A, US3444987 A,

Forward Citations:

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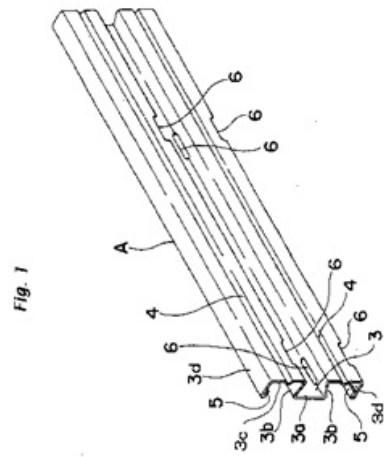
A conveyor assembly having upper and lower truss portions includes a hinge mechanism structurally arranged to be secured to the upper truss and lower truss portions. Rotational movement of the hinge mechanism lowers the lower truss portion while simultaneously positioning the upper truss portion in a plane substantially parallel to the plane of the lower truss portion.



Title:	FRAME MATERIAL OF CONVEYOR SYSTEM, RUNNING FRAME DEVICE USING THE FRAME MATERIAL, AND RUNNING RAIL MOUNTING STRUCTURE OF CONVEYOR SYSTEM																																																												
Priority:	JP20000111734 20000413		JP20000129189 20000428		WO2001JP03166 20010412																																																								
Family:	<table><thead><tr><th>Publication number</th><th>Publication date</th><th>Application number</th><th>Application date</th></tr></thead><tbody><tr><td>DE60139461 D1</td><td>20090917</td><td>DE20016039461</td><td>20010412</td></tr><tr><td>EP1273536 A1</td><td>20030108</td><td>EP20010919913</td><td>20010412</td></tr><tr><td>EP1273536 A4</td><td>20080416</td><td>EP20010919913</td><td>20010412</td></tr><tr><td>EP1273536 B1</td><td>20090805</td><td>EP20010919913</td><td>20010412</td></tr><tr><td>ES2328447 T3</td><td>20091113</td><td>ES20010919913T</td><td>20010412</td></tr><tr><td>JP2001294315 A2</td><td>20011023</td><td>JP20000111734</td><td>20000413</td></tr><tr><td>JP2001310812 A2</td><td>20011106</td><td>JP20000129189</td><td>20000428</td></tr><tr><td>JP3498179 B2</td><td>20040216</td><td>JP20000111734</td><td>20000413</td></tr><tr><td>KR100529739 B1</td><td>20051117</td><td>KR20027013626</td><td>20010412</td></tr><tr><td>KR20030011298 A</td><td>20030207</td><td>KR20027013626</td><td>20010412</td></tr><tr><td>US2003029351 AA</td><td>20030213</td><td>US20020220294</td><td>20020911</td></tr><tr><td>US6854397 BB</td><td>20050215</td><td>US20020220294</td><td>20020911</td></tr><tr><td>WO0179086 A1</td><td>20011025</td><td>WO2001JP03166</td><td>20010412</td></tr></tbody></table>					Publication number	Publication date	Application number	Application date	DE60139461 D1	20090917	DE20016039461	20010412	EP1273536 A1	20030108	EP20010919913	20010412	EP1273536 A4	20080416	EP20010919913	20010412	EP1273536 B1	20090805	EP20010919913	20010412	ES2328447 T3	20091113	ES20010919913T	20010412	JP2001294315 A2	20011023	JP20000111734	20000413	JP2001310812 A2	20011106	JP20000129189	20000428	JP3498179 B2	20040216	JP20000111734	20000413	KR100529739 B1	20051117	KR20027013626	20010412	KR20030011298 A	20030207	KR20027013626	20010412	US2003029351 AA	20030213	US20020220294	20020911	US6854397 BB	20050215	US20020220294	20020911	WO0179086 A1	20011025	WO2001JP03166	20010412
Publication number	Publication date	Application number	Application date																																																										
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Probable Assignee:	TSUBAKI YAMAKYU CHAIN CO																																																												
Assignee(s):(std):	FUKAZAWA SEIICHI ; KATO FUKUKAZU ; KOBAYASHI KAZUYUKI ; KOEDA MOTOYA ; YAMAKYU CHAIN KK ; TERAJIMA ATUSI																																																												
Assignee(s):	YAMAKYU CHAIN CO ; YAMAKYU CHAIN CO LTD ; TSUBAKI YAMAKYU CHAIN CO																																																												
Inventor(s):(std):	FUKAZAWA SEIICHI ; KATO FUKUKAZU ; KOBAYASHI KAZUYUKI ; KOEDA MOTOIE ; KOEDA MOTOYA ; TERAJIMA ATSUSHI ; TERAJIMA ATUSI																																																												
Agent(s):	GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET																																																												
Designated states:	AT BE CH CN CY DE DK ES FI FR GB GR IE IT KR LU MC NL PT SE TR US																																																												
International class (IPC 8-9):	B61B10/04 B61B13/06 B65G21/02 B65G21/06 B65G21/20 B65G21/22 (Advanced/Invention); B65G21/06 (Advanced/Non-invention); B61B10/00 B61B13/04 B65G21/00 B65G21/20 (Core/Invention)																																																												
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Abstract:

There is provided a metallic frame member usable in a traveling frame assembly, guide rail or receiving rail used in a conveyor system. It includes a rear section extending longitudinally of the frame member (3a), a pair of inclined sections (3b) bent in directions in which they extend towards each other from lateral ends of the rear section (3a), a pair of front sections (3c) bent in directions in which they extend from lateral ends of the pair of inclined sections (3b) generally in parallel to the rear section and a pair of side sections (3d) bent from lateral ends of the front sections (3c) towards the rear section (3a), the rear section (3a) and pair of inclined sections (3b) defining together a longitudinal concavity having a generally C-like vertical cross-sectional profile, and each of the side sections (3d) being folded back at the free end inside or outside thereof to form a folded portion (5). Thus, even in case each of the rear section, inclined sections, front sections and side sections is formed relatively thin, the frame member as whole can have a great strength and rigidity and thus the frame member can be a lightweight, high precision-worked one. In addition, since the frame member is simple in construction, suitable for mass production and inexpensive, so it is optimum for use to form a traveling frame assembly, guide rail, receiving rail, etc. used in the conveyor systems.



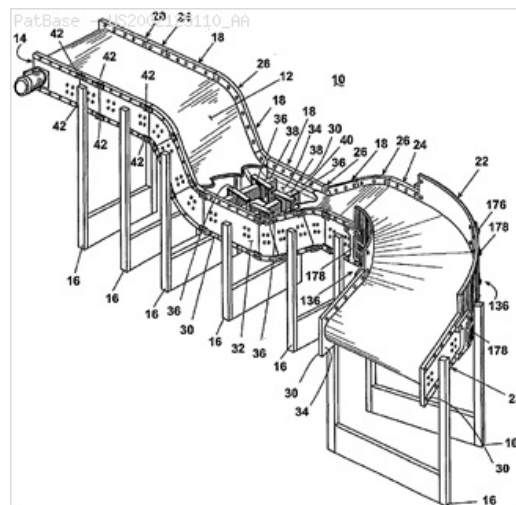
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: DYNAMIC CONVEYOR CORP
Assignee(s):(std): DYNAMIC CONVEYOR CORP ; KUHAREVICZ PAUL ; MAJESKI DAUGHN ; SLOTMAN CORY ; CHAMBERS CURTIS
Assignee(s): CHAMBERS CURTIS D ; DYNAMIC CO NV
Inventor(s):(std): SLOTMAN CORY ; MAJESKI DAUGHN ; KUHAREVICZ PAUL ; CHAMBERS CURTIS D ; CHAMBERS CURTIS
Inventor(s): CORY SLOTMAN ; CURTIS CHAMBERS ; DAUGHN MAJESKI ; PAUL KUHAREVICZ
Agent(s): BORDEN LADNER GERVAIS LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ 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 MZ 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
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International class (IPC 1-7): B65G21/00 B65G21/06 B65G21/08 B65G21/16
CPC: B65G21/06 B65G21/16 B65G2207/30
European class: B65G21/06 B65G21/16 L65G207/30
US class: 198/831 198/831S 198/841 198/841S 198/860.2 198/860.200P 198/861.1 198/861.2 198/861.200S
[Classification Explorer](#)
Cited documents: US6032781 A, US5163545 A, US5131531 A, US4961492 A, US4738354 A, US4144965 A, US3920115 A, US3707218 A, US2795315 A, JP3195616 A2,
Forward Citations: WO16035011, WO07017439, US9751694, US9409721, US9102476, US9085414, US8925718, US7222731, US6974017, US6857517, US2014251768, US2006231373, US2005211534, US2004262120, US2004084286, US2004060797, AU2012261746,

Abstract:

A modular conveyor system (10) comprising multiple modules such as a straight module (18), a powered module (20). a return module (23), and a radius turn module (22) The modules can be directly connected or connected by one or more connection assemblies (26). The radius turn module includes bendable side walls (131) that can be combined or cut as needed to obtain the desired angle of turn.



Title:

Priority:

Family:

Probable Assignee:

Assignee(s):(std):

Inventor(s):(std):

International class (IPC 8-9):

International class (IPC 1-7):

CPC:

European class:

US class:

[Classification Explorer](#)

Cited documents:

Forward Citations:

Convertible conveyor bed and method

US19990166459P 19991119US20000713509 20001115

Publication number

Publication date

Application number

Application date

US6427831 BA

20020806

US20000713509

20001115

NORTON FRANK B

NORTON FRANK B

NORTON FRANK B

B65G21/06 (Advanced/Invention);
B65G21/00 (Core/Invention)

B65G15/60

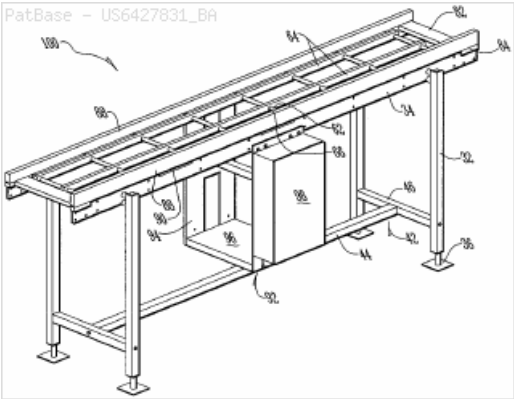
B65G21/06

B65G21/06

198/841 198/860.2 198/861.1

US6227355 BA, US5826703 A, US5799780 A, US5797481 A, US5762178 A, US5715931 A, US5692597 A, US5529171 A, US5447224 A, US5421451 A, US5205400 A, US5178263 A, US5164777 A, US5131531 A, US4793470 A, US4598819 A, US4509637 A, US4325480 A, US4067428 A, US3115236 A, US2969820 A, US2016167885, US2016114714, US2014251768, US2014116857, US2012023866, US2011017573, US2010296860, US2010230548, US2010229704, US2010147179, US2010024677, US2009302290, US2009038498, US2009000923, US2007017786, US2005211534, US2004173436, CN103350866, CN103350866,

Abstract:
A conveyor bed has opposed sides and transverse nose bars on the ends of the sides to form an open frame. The sides carry also rungs. Elongated wear strips lay on the rungs to form a deck for a conveyor to slide thereon. The ends of the sides are formed with open mortises. The nose bars extend between opposite lateral ends formed a T-headed tenons. The tenons releasably couple with the open mortises. Hence the nose bars are adapted to couple onto the ends of the sides be locked there by the felt weight of the conveyor rolling over the nose bars. The elongated wear strips have an upper edge forming a conveyor supporting surface and a lower edge formed with notches. The notches are sized for receiving the rungs. Thus the notched wear strips are adapted to be weighted down in place on the rungs by the weight of the conveyor sliding thereon. The notches are sized for closely fitting the rungs to better stabilize the wear strips from unwanted displacement. The mortise and tenon couplings as well as the notches and rungs are adapted to facilitate frequent cycles of disassembly and re-assembly of the conveyor bed for maintenance operations such as hose-down or clean-up. Also, the side rails can be cut in two to get a reduced length. Thus the bed is convertible into shorter lengths except that the nose bars are re-usable without modification.



Title:

HYDRAULIC DEVICE FOR ASSEMBLY AND DISASSEMBLY OF CONVEYOR CHAINS USING INTERFERENCE-FIT CONNECTING PINS AND METHOD OF USING THE SAME

Priority:

US20000515671 20000229

Family:

Publication number	Publication date	Application number	Application date
 US6453657 BA	20020924	US20000515671	20000229

Probable Assignee:

SONY CORP

Assignee(s):(std):

SONY CORP ; SONY ELECTRONICS INC

Inventor(s):(std):

TERAVAINEN ANTHONY ALLAN

International class (IPC 8-9):

B21L21/00 B21L9/06 B25B27/02 B25B27/22 (Advanced/Invention);
B21L21/00 B21L9/00 B25B27/02 B25B27/14 (Core/Invention)

International class (IPC 1-7):

B21L21/00

CPC:

B21L9/065 B21L21/00 B25B27/026 B25B27/22 Y10T29/5377

European class:

B21L21/00 B21L9/06B B25B27/02C B25B27/22

US class:

29/243.53 59/11 59/7

Classification Explorer

Cited documents:

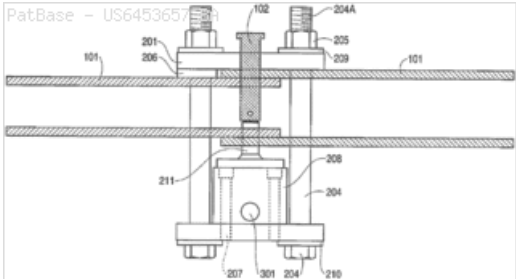
US5463862 A, US4870739 A, US4506501 A, US4063412 A, US3553960 A, US2387551 A, SU654343 T,

Forward Citations:

WO15143498, US8925718, US8834118, US8621838, US8240041, US7562518, US7430849, US6951096, US2012003095, US2010058566, US2009070980, US2008041860, US2007193247, US2006196027, US2003217454, CN106312903, CN105215918, CN103736907, CN103736907, CN103433421, CN103433421, CN102785074, CN102554603, CN102159364, AU2010201619, AU2010201619,

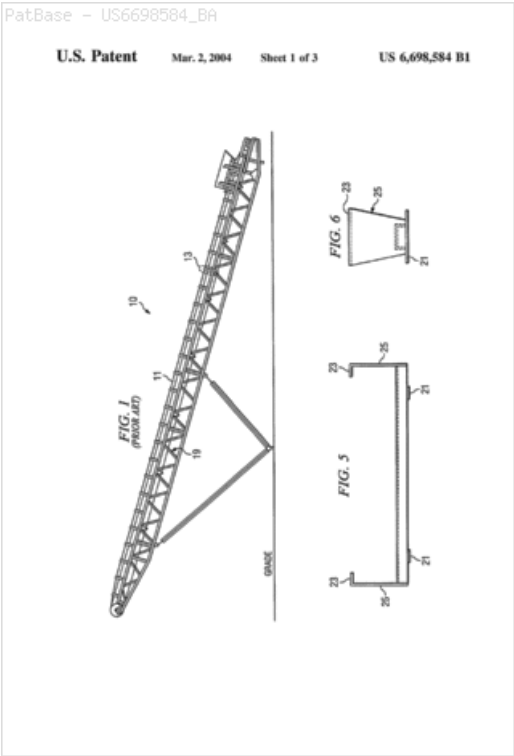
Abstract:

A portable hydraulic press with two opposing plates connected by bolts can be clamped on a conveyor chain that has interference-fit connecting pins between pairs of rectangular plates forming the chain links to assemble or disassemble the chain. Once the press is clamped in place, a hydraulic cylinder of the press is then actuated to force the connecting pin in or out of the chain. If the pin is being pushed out, it passes through a hole in a back plate of the press in order to disassemble or break the chain.



Title:	Conveyor truss bracket			
Priority:	US20020433629P 20021213		US20020328897 20021223	
Family:	Publication number	Publication date	Application number	Application date
	 US6698584 BA	20040302	US20020328897	20021223
Probable Assignee:	RAY RICHARD C			
Assignee(s):(std):	RAY RICHARD C			
Inventor(s):(std):	RAY RICHARD C			
International class (IPC 8-9):	B65G21/06 B65G21/14 (Advanced/Invention); B65G21/00 (Core/Invention)			
International class (IPC 1-7):	B65G21/00 B65G21/08 B65G21/10 B65G41/00			
CPC:	B65G21/06 B65G21/14 B65G2201/045			
European class:	B65G21/06 B65G21/14 L65G201/04D			
US class:	198/860.2 198/861.1			
Classification Explorer				
Cited documents:	US5762179 A, US4524864 A, US4261460 A, US3820650 A, US3656607 A,			
Forward Citations:	WO08115966, US9950873, US8944741, US8925718, US2016152416, US2010104407,			

Abstract:
An apparatus is provided for modifying a belt conveyor for enabling use of varying belt widths. The apparatus includes a pair of first mounting feet having slots and coupled by a cross member, wherein the first mounting feet are coupled to the cross member enabling the slots to mate with holes disposed on the frame, the apparatus further has second mounting feet having slots and adapted to couple to a first upper idler and a first lower idler, the apparatus further having supports coupled to opposite ends of the cross member, wherein a first end of the supports is coupled to the cross member and a second end is coupled to the second mounting feet. The apparatus is further characterized in that the cross member has a selectable length such that a second upper idler having a width greater than the first upper idler and a second lower idler having a width greater than the first lower idler can be coupled to the conveyor frame.



Title:

Priority:

Family:

CONVEYOR AND SUPPORT

US20030520931P 20031118

US20050992956 20050303

Publication number	Publication date	Application number	Application date
 US2005211534 AA	20050929	US20050992956	20050303
 WO05049457 A2	20050602	WO2004US39027	20041118
 WO05049457 A3	20051110	WO2004US39027	20041118

Probable Assignee:

Assignee(s):(std):

Assignee(s):

Inventor(s):(std):

Inventor(s):

Agent(s):

Designated states:

INTELLIGRATED INC

INTELLIGRATED INC ; TEFEND MATTHEW J ; TEFEND MATTHEW JOHN

WELLS FARGO FOOTHILL LLC AS AGENT ; WELLS FARGO FOOTHILL LLC AGENT AS ; FKI LOGISTEX INC

TEFEND MATTHEW J ; TEFEND MATTHEW JOHN

TEFEND MATTHEW

FROST BROWN TODD LLC

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CFCG 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 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

International class (IPC 8-9):

International class (IPC 1-7):

CPC:

European class:

US class:

B65G13/11 B65G21/00 B65G21/02 B65G21/06 B65G23/06 B65G47/46 B65G47/84 (Advanced/Invention)

B65G13/11 B65G21/00 B65G21/02 B65G23/06 B65G47/46 B65G47/84

B65G13/11 B65G21/02 B65G21/06 B65G23/06 B65G47/46 B65G47/844 B65G2207/30 B65G2207/36

B65G13/11 B65G21/02 B65G21/06 B65G23/06 B65G47/46 B65G47/84A4 L65G207/30 L65G207/36

198/860.2 198/860.200P

[Classification Explorer](#)

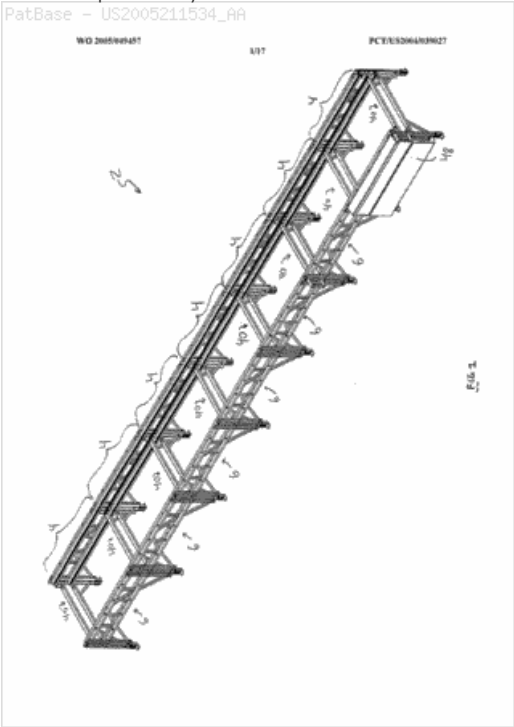
Cited documents:

Forward Citations:

US6814215 BB, US6782993 BB, US6705461 BB, US6651306 BA, US6510942 BB, US6427831 BA, US6186311 BA, US5979636 A, US5740901 A, US5370218 A, US5328020 A, US5203442 A, US4986412 A, US4930623 A, US4832169 A, US4427104 A, US4345680 A, US3887061 A, US2793738 A, US2688394 A, GB1349930 A, GB1299605 A,

WO16034763, WO15081234, WO11064088, US9718648, US9611976, US9380708, US9075417, US8925718, US8919542, US8820520, US8813943, US8774971, US8700191, US8517170, US8235203, US2015144765, US2012107074, US2012080292, US2011100786, US2009250140, US2009138126, JP2016538121, EP3074336, EP3003928, EP2316757, CN105829235, CN104174177, CN103587936,

Abstract:
A conveyor has frame sections formed from two laterally spaced apart longitudinal truss frames connected together on their ends by lateral truss frames. Sections include trussed beams which support the conveying medium. In the case of a moving conveying medium, upper and lower trussed beams are used to support the conveying run and the return run. Divert chassis are carried by one or more frame sections, secured in divert chassis tracks which allow easy installation adjustment of the divert locations. Spur conveyor supports are included which allow easy installation and adjustment of the spur conveyor locations.



Title:

TELESCOPING STACKING CONVEYOR HAVING A SINGLE CONVEYOR BELT AND SINGLE DRIVE MECHANISM FOR THE BELT

Priority:

US20040802484 20040317

Family:

Publication number	Publication date	Application number	Application date
 US6929113 BA	20050816	US20040802484	20040317

Probable Assignee:

HOOVER CONVEYOR AND FABRICATION CORP

Assignee(s):(std):

HOOVER CONVEYOR AND FABRICATION

Assignee(s):

HOOVER CONVEYOR AND FABRICATION CORP ; HOOVER CO EYOR AND F RICA ABNV ; HOOVER CONVEYOR AND FAB

Inventor(s):(std):

HOOVER JERELL D ; HOOVER SHAWN M

Agent(s):

ECKERT SEAMANS CHERIN AND MELLOTT LLC; LANG IV WILLIAM F; WILLIAM F

International class (IPC 8-9):

B65G21/14 B65G41/00 (Advanced/Invention);
B65G21/00 B65G41/00 (Core/Invention)

International class (IPC 1-7):

B65G21/14

CPC:

B65G21/14 B65G41/008

European class:

B65G21/14 B65G41/00D2

US class:

198/313 198/588 198/594 198/812

[Classification Explorer](#)

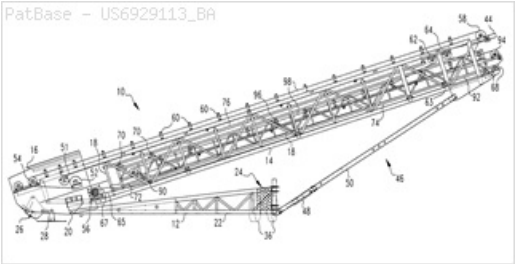
Cited documents:

US6360876 BA, US6056252 A, US5833043 A, US5515961 A, US5390777 A, US5203442 A, US4427104 A, US4135614 A, US3945484 A, US3826353 A, US3825107 A, US2263506 A,

Forward Citations:

WO09006723, US9957108, US9676559, US9643789, US9499348, US9475647, US9428348, US9334124, US9010521, US8925718, US8739956, US8662291, US8584826, US8186502, US8074767, US7849641, US7806757, US7784597, US7455173, US7448486, US7416075, US7354235, US2014262693, US2014251768, US2013118866, US2013092506, US2012048674, US2011126700, US2010016047, US2010008750, US2009071797, US2009013617, US2008035453, US2006228198, GB2481891, GB2481891, GB2479181, GB2479181, EP2377784, CN103640854, CN103640854,

Abstract:
A portable radially stacking conveyor has a telescoping stinger, with the stinger and main section sharing a single conveyor belt having a single drive mechanism.

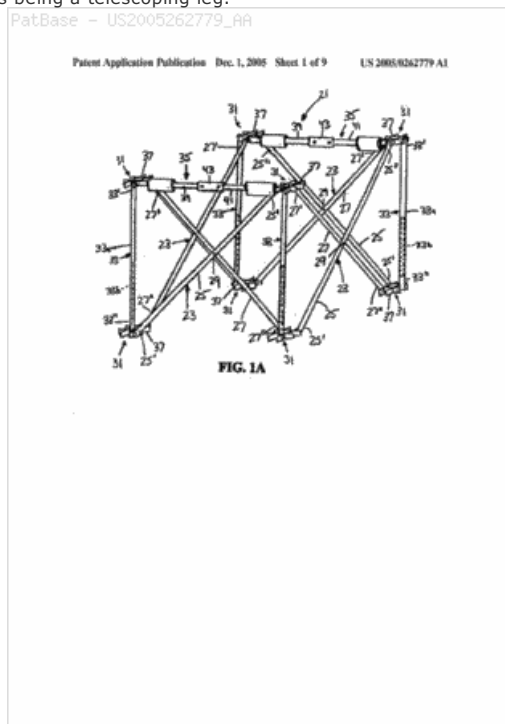


Title: EXPANDABLE AND COLLAPSIBLE MODULAR STRUCTURE**Priority:** US20040709786 20040527

Family:	Publication number	Publication date	Application number	Application date
	US2005262779 AA	20051201	US20040709786	20040527
	US7357238 BB	20080415	US20040709786	20040527
	WO05118986 A2	20051215	WO2005US18053	20050523
	WO05118986 A3	20080221	WO2005US18053	20050523

Probable Assignee: WORLD SHELTERS INC**Assignee(s):(std):** WORLD SHELTERS INC ; ZEIGLER THEODORE R ; ZEIGLER THEODORE RICHARD**Inventor(s):(std):** ZEIGLER THEODORE R**Inventor(s):** ZEIGLER THEODORE**Agent(s):** WHITE REDWAY AND BROWN LLP; WRB-IP LLP; WRB IP LLP**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 KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG 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**International class (IPC 8-9):** B65G13/00 E04H12/18 E04H15/50 (Advanced/Invention); B65G13/00 E04H12/00 E04H15/34 (Core/Invention)**International class (IPC 1-7):** E04H12/18**CPC:** E04H15/50**European class:** E04H15/50**US class:** 193/35TE 52/109 52/645 52/646 52/648.1[Classification Explorer](#)**Cited documents:** USRE33710 E, US7296699 BB, US7188842 BB, US6799594 BB, US6729460 BB, US6598614 BB, US6588568 BA, US6585083 BB, US6550491 BA, US6141934 A, US5701713 A, US5651228 A, US5632371 A, US5632361 A, US5456348 A, US5456347 A, US5444946 A, US5367852 A, US5327700 A, US5274980 A, US5230196 A, US4970841 A, US4838003 A, US4800663 A, US4761929 A, US4747239 A, US4689932 A, US4666102 A, US4658560 A, US4637180 A, US4625830 A, US4579066 A, US4561618 A, US4522008 A, US4518061 A, US4512097 A, US4473986 A, US4437275 A, US4359305 A, US4334660 A, US4290244 A, US4280521 A, US4276726 A, US4036466 A, US4026313 A, US3968808 A, US3496687 A, US3190405 A,**Forward Citations:** WO09095243, WO09095243, US9909314, US9663248, US9631393, US9228369, US8925718, US8899536, US8875774, US8484925, US8069769, US8028488, US7934444, US7466286, US2016325852, US2016235024, US2015308147, US2014251768, US2011005695, US2011000362, US2010326004, US2010064624, US2010043629, US2007205957, US2007145195, JP2011511186,**Abstract:**

An expandable and collapsible structural module is provided. The module includes at least three strut pairs, the at least three strut pairs being arranged end to end, at least three corners being defined by connected ends of the at least three strut pairs. The module also includes at least three legs pivotably connected at respective ones of the at least three corners to the connected ends of the at least three strut pairs, at least one of the at least three legs being a telescoping leg.



Title:CONVEYOR CONVERSION KIT FOR REPLACING ROLLERS WITHIN CONVEYOR SYSTEM AND METHOD

Priority:US20020429491P 20021129US20030723481 20031126US20050297951 20051209

Family:

	Publication number	Publication date	Application number	Application date
■	US2006096844 AA	20060511	US20050297951	20051209
■	US7000759 BA	20060221	US20030723481	20031126
■	US7128201 BB	20061031	US20050297951	20051209

Probable Assignee:JONES WILLIAM D

Assignee(s):(std):JONES WILLIAM D ; JONES WILLIAM DEVERE

Inventor(s):(std):JONES WILLIAM D ; JONES WILLIAM DEVERE

Inventor(s):JONES WILLIAM

Agent(s):BARBER LEGAL; CRAIG

International class
(IPC 8-9):B65G15/60 B65G35/00 (Advanced/Invention);
B65G15/60 B65G35/00 (Core/Invention)

CPC:B65G15/62 B65G2207/30

European class:B65G15/62 L65G207/30

US class:198/615 198/615S 198/841 198/860.1 198/860.100S 198/861.1

[Classification Explorer](#)

Cited documents:

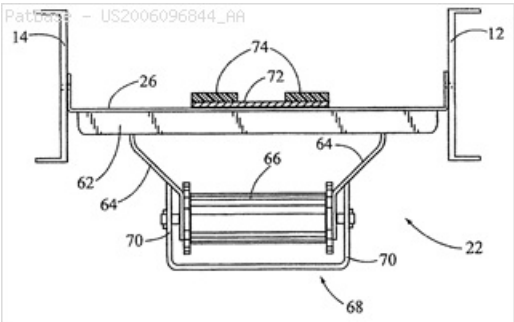
US7000759 BA, US6640966 BB, US6640966 BA, US6640966 B1, US6269939 BA, US6227355 BA, US5988363 A, US5692597 A, US5601180 A, US5593019 A, US5447224 A, US5178263 A, US5082108 A, US5002108 A, US4967897 A, US4823939 A, US4789056 A, US4724953 A, US4650067 A, US4518303 A, US4359156 A, US4215776 A, US4008801 A, US3605994 A, US3200940 A,

Forward Citations:

WO12062549, US9776800, US9637314, US9394113, US9334896, US9334123, US9028613, US8925718, US8770393, US7946415, US7562766, US7467708, US7178665, US7128201, US7128201, US2016167885, US2014251768, US2014238827, US2013115373, US2010147648, US2009008225, US2007108026, US2006237292, US2006096844, ITRM20110255, EP3112278, EP3095736, CN103662594, CN103241502, CN103201178, CN103201178,

Abstract:

An endless loop belt conveyor system that is free of rollers is produced from a roller conveyor or a powered endless belt roller conveyor using a conversion kit. The conversion kit includes at least one endless loop belt conveyor guide; and at least two conveyor guide mounts. In addition, the conversion kit may include a motor driven roller section and an idler roller section both designed to be dropped in at the head portion or at the tail portion of a frame. The resulting converted conveyor system, and also the method of removing and replacing roller conveyors to convert the conveyor system to an endless belt conveyor that is free of rollers is taught.



Title: CONVERTING A PRE-EXISTING CONVEYOR FRAME INTO A BELT CONVEYOR
Priority: US20050907981 20050422
Family:

Publication number	Publication date	Application number	Application date
US2006237292 AA	20061026	US20050907981	20050422
US7178665 BB	20070220	US20050907981	20050422

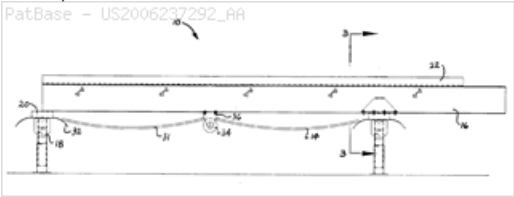
Probable Assignee: LAITRAM LLC
Assignee(s):(std): LAITRAM L L C ; LAITRAM LLC
Inventor(s):(std): RYAN ROBERT S
Inventor(s): RYAN ROBERT
Agent(s): LAITRAM LLC LEGAL DEPARTMENT
International class (IPC 8-9): B65G21/00 B65G21/08 (Advanced/Invention); B65G21/00 (Core/Invention)
CPC: B65G15/00 B65G21/00
European class: B65G15/00 B65G21/00
US class: 198/836.1 198/860.1

[Classification Explorer](#)

Cited documents: US7000759 BA, US6848572 BA, US6698580 BB, US6378695 BA, US5762178 A, US5447224 A, US5316134 A, US4724953 A, US2004262120 AA,

Forward Citations: WO17087321, WO15112782, WO13192366, WO12031726, US9914591, US9764902, US9527672, US9522785, US9511942, US8925718, US8770393, US8562241, US8376129, US7946415, US7921989, US7918333, US7562766, US2017088031, US2017050805, US2015175360, US2014251768, US2012267216, US2010296860, US2009260457, US2009020393, US2009008225, CN105939945, CN104411605,

Abstract:
A kit and associated methods for converting a pre-existing conveyor frame into a belt conveyor. The converted conveyor comprises a U-shaped pan mounted to the top of a pre-existing conveyor frame. The U-shaped pan has a pair of side walls flanking a base. A carryway is fastened to the base of the pan to support a modular conveyor belt. Liners extending from the top of the side walls extend into the pan to act as low-friction side rails. Inverted-U-shaped guides attached to the bottom portion of the pre-existing frame at periodically spaced frame supports guide the belt in the returnway beneath the carryway. Spacers interposed between the frame supports and the frame provide vertical and lateral clearance for the belt along the returnway. The kit provides parts for converting a pre-existing conveyor frame into a belt conveyor.



Title:

CONVEYOR SYSTEM FOR LOADING AND UNLOADING AIRCRAFT BAGGAGE

Priority:

US20050186864 20050722

Family:

	Publication number	Publication date	Application number	Application date
	US2007020069 AA	20070125	US20050186864	20050722
	US7469782 BB	20081230	US20050186864	20050722

Probable Assignee:

DEW ENGINEERING AND DEVELOPMENT ULC

Assignee(s):(std):

DEW ENGINEERING AND DEVELOPMENT

Assignee(s):

DEW ENGINEERING AND DEVELOPMENT LIMITED ; DEW ENGINEERING AND DEVELOPMENT LTD ; DEW ENGINEERING AND DEVELOPMENT ULC

Inventor(s):(std):

HUTTON NEIL

Agent(s):

FREEDMAN AND ASSOCIATES; WEIR MARK ROBERT; MARK ROBERT

International class (IPC 8-9):

B65F9/00 B65G15/60 (Advanced/Invention);
B65F9/00 (Core/Invention)

CPC:

B64F1/32 B65G67/08 B65G2201/0264 Y02T50/82

European class:

B64F1/32 B65G67/08 L65G201/02G Y02T50/82

US class:

198/588 198/594 198/812 414/400 414/400P 414/528 414/679

Classification Explorer

Cited documents:

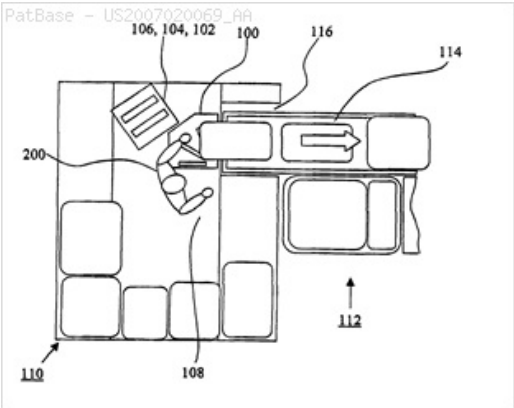
WO9854073 A1, WO8902852 A1, WO05092706 A1, WO05073110 A1, US7261202 BA, US7156604 BB, US7033125 BB, US6893200 BB, US6823985 BB, US6431346 BA, US6006893 A, US5681202 A, US5048704 A, US5000646 A, US4860973 A, US4780043 A, US3799479 A, US3741504 A, US3356236 A, US2648422 A, US2494302 A, US2346659 A, US2004105740 AA, US2003161707 AA, US2003049107 AA, DE10007332 A1,

Forward Citations:

WO12122982, US9623569, US9555982, US9493316, US9487361, US9315345, US8925718, US8647039, US8596947, US8562276, US8496104, US2012152699, US2009249708, US2006133913, DE102016004717, CN103863573, CN103459275,

Abstract:

A cargo conveyor for use in loading and unloading a cargo compartment comprises: a plurality of conveyor units for being disposed within the cargo compartment and for being temporarily arranged to support a loading or unloading conveyor path having a length that varies during a same loading or unloading operation, the conveyor path for being lengthened during the unloading operation and for being shortened during the loading operation, the plurality of conveyor units for being coupled with and decoupled from the conveyor path for lengthening the conveyor path during the unloading operation and for shortening the conveyor path during the loading operation, respectively.



Title: APPARATUS AND METHOD FOR CONVEYING MATERIALS
Priority: US20050706640P 20050808 US20060804151P 20060607 US20060461199 20060731
Family:

Publication number	Publication date	Application number	Application date
US2007029171 AA	20070208	US20060461199	20060731
US7673741 BB	20100309	US20060461199	20060731

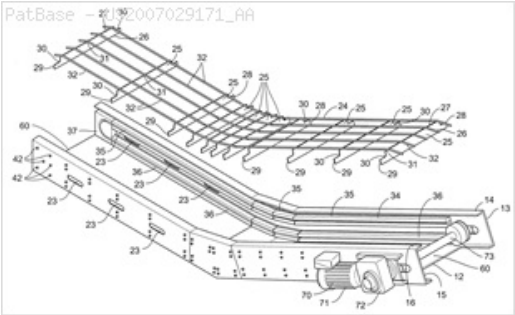
Probable Assignee: INTER SOURCE RECOVERY SYSTEMS INC
Assignee(s):(std): INTER SOURCE RECOVERY SYSTEMS
Assignee(s): INTER SOURCE RECOVERY SYSTEMS INC
Inventor(s):(std): NEMEDI WILLIAM D
Inventor(s): NEMEDI WILLIAM
Agent(s): MARSHALL GERSTEIN AND BORUN LLP
International class B65G15/60 (Advanced/Invention);
(IPC 8-9): B65G15/60 (Core/Invention)
CPC: B65G15/42 B65G15/56 B65G15/62 B65G2201/04
European class: B65G15/42 B65G15/56 B65G15/62 L65G201/04
US class: 198/834 198/835 198/836.1 198/836.2 198/836.3 198/837 198/840 198/841 198/844.1 198/853 198/861.1

[Classification Explorer](#)

Cited documents: US6962252 BB, US6843444 BB, US6564931 BA, US6053307 A, US5431613 A, US5320589 A, US5320214 A, US5106487 A, US4820143 A, US4294059 A, US4144965 A, US4038152 A, US3901379 A, US3650376 A, US3429652 A, US2001025769 AA,

Forward Citations: WO15007289, US9776800, US9776391, US9440794, US9394111, US9334896, US9334123, US9067737, US8925718, US8919541, US8710125, US8701874, US8272642, US8113339, US7988609, US2016257499, US2015329293, US2015027857, US2014251768, US2014238827, US2014116857, US2011198199, US2011094860, US2010052242, US2009042708, ITMC20090239, FR2943046, EP2825486, CN105966843,

Abstract:
A conveyor apparatus and method for conveying materials in which the conveyor belt has chord members located along each belt side. The chord members are adapted to fit within a slotted track assembly whereby the chord members slide relative to the track assemblies when the conveyor is actuated.



Title: BRACED TELESCOPING SUPPORT STRUT AND SYSTEM
Priority: US20060586780 20061026 CA20072606711 20071012 US20070975205 20071018
US20080315319 20081202

Family:	Publication number	Publication date	Application number	Application date
	CA2606711 AA	20080426	CA20072606711	20071012
	CA2606711 C	20100420	CA20072606711	20071012
	US2008101910 AA	20080501	US20070975205	20071018
	US2009078545 AA	20090326	US20080315319	20081202
	US7284947 BA	20071023	US20060586780	20061026
	US7470101 BB	20081230	US20070975205	20071018
	US7618231 BB	20091117	US20080315319	20081202

Probable Assignee: SUPERIOR IND INC
Assignee(s):(std): FELTON JARROD J ; SUPERIOR IND L L C ; SUPERIOR IND LLC
Assignee(s): SUPERIOR INDUSTRIES L L C ; SUPERIOR INDUSTRIES LLC ; JPMORGAN CHASE BANK NA
ADMINISTRATIVE AGENT AS ; SUPERIOR IND ; SUPERIOR IND INC
Inventor(s):(std): FELTON JARROD J
Agent(s): BERESKIN AND PARR LLP SENCRL SRL; DICKE BILLIG AND CZAJA; DICKE BILLIG AND CZAJA PLLC
International class
(IPC 8-9): B65G21/02 B65G41/00 B66F3/28 E04H12/18 (Advanced/Invention);
B65G21/00 B65G41/00 B66F3/24 E04H12/00 (Core/Invention)
CPC: B65G21/14 B65G41/002
European class: B65G21/14 B65G41/00A2
US class: 198/302 198/861.1 198/861.100P 248/654 248/654S 414/787 414/787P

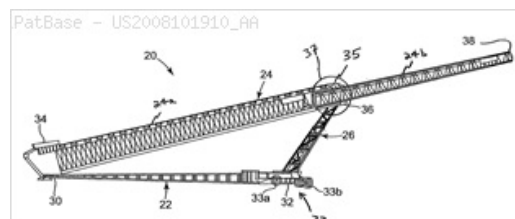
[Classification Explorer](#)

Cited documents: US7470101 BB, US7284947 BA, US7255198 BA, US6360876 BA, US6186311 BA, US6053284 A,
US5390777 A, US5120186 A, US4773521 A, US4715488 A, US3944054 A, US3752298 A, US3708937 A,
US3620579 A, US3552546 A, US3291258 A, US2875888 A, US2037860 A, US2005167197 AA,

Forward Citations: WO17223253, US8925718, US8584826, US8011490, US7849641, US7618231, US7470101,
US2014251768, US2011126700, US2009078545, US2009013617, US2008101910, GB2479181,
GB2479181,

Abstract:

A telescoping support strut configured to support a conveyor assembly of a portable conveyor system includes a first strut section and a second strut section configured to telescopically receive and substantially surround beams of the first strut section. The first strut section includes a first beam, an opposing generally parallel second beam, and a plurality of braces coupled between the first and second beams. The second strut section includes a first channel beam, an opposing generally parallel second channel beam, and a plurality of braces coupled between the first and second channel beams. Each channel beam comprises a perimeter wall configured to telescopically receive and substantially surround a respective beam of the first strut section. Each channel beam further configured to define a slot in the perimeter wall adjacent to facing surfaces of the respective beams of the first strut section.

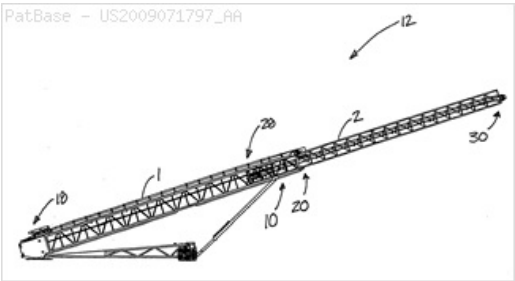


Title:	TELESCOPING CONVEYOR DRIVE SYSTEM																												
Priority:	US20070891480 20070810		CA20082627119 20080320		US20080291469 20081110																								
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Publication number	Publication date	Application number	Application date																										
CA2627119 AA	20090210	CA20082627119	20080320																										
CA2627119 C	20130723	CA20082627119	20080320																										
US2009071797 AA	20090319	US20080291469	20081110																										
US7448486 BA	20081111	US20070891480	20070810																										
US7784597 BB	20100831	US20080291469	20081110																										
Probable Assignee:	MASABA INC																												
Assignee(s):(std):	CRANDALL CLAY ; FRANKL JIM ; MASABA INC																												
Assignee(s):	CRANDALI CLAY																												
Inventor(s):(std):	CRANDALI CLAY ; CRANDALL CLAY ; FRANKL JIM																												
Agent(s):	MILLER THOMSON LLP; WOODS FULLER SHULTZ AND SMITH PC ATTN JEFFREY A PROEHL; PROEHL JEFFREY A; WOODS FULLER SHULTZ AND SMITH PC; JEFFREY A; WOODS FULLER SCHULTZ AND SMITH PC																												
International class (IPC 8-9):	B65G15/26 B65G21/14 (Advanced/Invention); B65G15/00 B65G21/00 (Core/Invention)																												
CPC:	B65G15/26 B65G41/002																												
European class:	B65G15/26 B65G41/00A2																												
US class:	198/313 198/812 198/812S																												

[Classification Explorer](#)

Cited documents:	US7448486 BA, US7322462 BB, US7168555 BB, US7108125 BB, US6935487 BB, US6929113 BA, US6752261 BA, US6360876 BA, US6298981 BA, US6056252 A, US6006893 A, US5902089 A, US5833043 A, US5718325 A, US5515961 A, US5423413 A, US5351809 A, US5256021 A, US5203442 A, US5088873 A, US5074402 A, US5067867 A, US5009560 A, US4813526 A, US4780041 A, US4679652 A, US4678652 A, US4474287 A, US4245732 A, US4135614 A, US3993204 A, US3874136 A, US3613866 A, US3341029 A, US2003029694 AA,
Forward Citations:	US9950868, US9409714, US9315328, US8925718, US8647039, US8083047, US7793770, US7784597, US2015060241, US2012325969, US2009071797, GB2479181, GB2479181, CN106185169, CN105035773, CN103935683, CN103935683, CN103863756, CN103057896,

Abstract:
An extendable conveyor apparatus is disclosed and comprises a stationary conveyor section, a movable conveyor section extendable with respect to the stationary conveyor section, and a movement assembly configured to move the movable conveyor section with respect to the stationary conveyor section. The movement assembly comprises a plurality of teeth mounted on a first conveyor section, and a teeth engaging apparatus mounted on a second conveyor section and configured to engage and move the teeth on the first conveyor section with respect to the second conveyor section. A system for moving a first elongate structure with respect a second elongate structure comprises a plurality of teeth in a substantially linear arrangement for mounting on the first elongate structure, and a teeth engaging apparatus configured for mounting on the second elongate structure, the teeth engaging structure comprising a chain loop engaging the teeth such that rotation of the loop moves the first elongate structure relative to the second elongate structure



Title:

TRUSS ASSEMBLY SYSTEMS AND METHODS

Priority:

US20070757070 20070601

Family:

Publication number	Publication date	Application number	Application date
US2008300713 AA	20081204	US20070757070	20070601
US8136804 BB	20120320	US20070757070	20070601

Probable Assignee:

MENARD INC

Assignee(s):(std):

LEITH BRETT ; MENARD INC

Inventor(s):(std):

LEITH BRETT

Agent(s):

MERCHANT AND GOULD PC

International class (IPC 8-9):

B23P11/00 B23P19/00 B27F7/15 B65G1/00 E04C3/02 G06F19/00 (Advanced/Invention);
B23P11/00 B23P19/00 B65G1/00 G06F19/00 (Core/Invention)

CPC:

Y10S100/913 Y10S269/91 Y10T29/49625 Y10T29/534 B23P21/004 B27F7/155 E04C3/16

European class:

B23P21/00B B27F7/15B E04C3/16

US class:

100/913 269/304 269/37 269/910 29/791 29/791S 29/897.31 29/897.310S 414/749.1 414/749.100S
700/117 700/117P

Classification Explorer

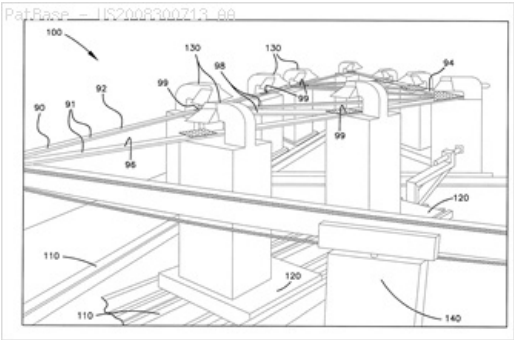
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US6955346 BB, US6899324 BB, US6702269 BA, US6079325 A, US5867905 A, US5854747 A, US5833222 A, US5361495 A, US4252058 A, US3824919 A, US3771439 A, US3172125 A, US3068483 A, US2006061028 AA, US2005212192 AA, US2005121844 AA, US2005011375 AA, US2004207139 AA, US2004181936 AA, US2003196326 AA,

Forward Citations:

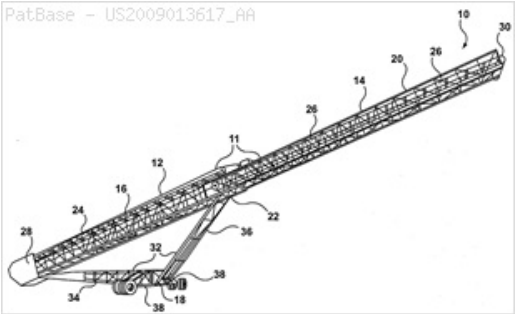
WO15038479, US9555508, US9004479, US8925718, US8818547, US7894920, US7835810, US2013283617, US2012235341, US2010030363, US2009234693, US2007264107, ITBO20100244, EP2381324, CN103659216, CN103659216,

Abstract:
An automated assembly system for assembling a truss from a plurality of truss members and connection plates includes a plurality of rail assemblies, a plurality of trolleys, a plurality of press assemblies, and a control system. The rail assemblies include stationary rail assemblies and moveable rail assemblies. The trolleys are supported by the rail assemblies. The press assemblies are supported by the trolleys. The press assemblies are configured to embed the connection plates into the truss members. The control system is programmed to control the operation of the automated assembly system. An ejector system is configured to remove assembled trusses from the automated assembly system.



Title:	UNDERCARRIAGE FOR A TELESCOPIC FRAME																																																												
Priority:	US20070776714 20070712		WO2007CA01618 20070912		US20100926577 20101126																																																								
Family:	<table><tr><th>Publication number</th><th>Publication date</th><th>Application number</th><th>Application date</th></tr><tr><td> AU2007356411 AA</td><td>20090115</td><td>AU20070356411</td><td>20070912</td></tr><tr><td> AU2007356411 BB</td><td>20120315</td><td>AU20070356411</td><td>20070912</td></tr><tr><td> CA2694477 AA</td><td>20100112</td><td>CA20072694477</td><td>20070912</td></tr><tr><td> CA2694477 C</td><td>20160315</td><td>CA20072694477</td><td>20070912</td></tr><tr><td> GB201001666 A0</td><td>20100317</td><td>GB20100001666</td><td>20070912</td></tr><tr><td> GB2463843 A1</td><td>20100331</td><td>GB20100001666</td><td>20070912</td></tr><tr><td> GB2463843 B2</td><td>20120815</td><td>GB20100001666</td><td>20070912</td></tr><tr><td> IN00446KN2010 A</td><td>20100514</td><td>IN2010KN00446</td><td>20100204</td></tr><tr><td> MX2010000507 A1</td><td>20100409</td><td>MX20100000507</td><td>20070912</td></tr><tr><td> US2009013617 AA</td><td>20090115</td><td>US20070776714</td><td>20070712</td></tr><tr><td> US2011126700 AA</td><td>20110602</td><td>US20100926577</td><td>20101126</td></tr><tr><td> US7849641 BB</td><td>20101214</td><td>US20070776714</td><td>20070712</td></tr><tr><td> WO09006723 A1</td><td>20090115</td><td>WO2007CA01618</td><td>20070912</td></tr></table>					Publication number	Publication date	Application number	Application date	AU2007356411 AA	20090115	AU20070356411	20070912	AU2007356411 BB	20120315	AU20070356411	20070912	CA2694477 AA	20100112	CA20072694477	20070912	CA2694477 C	20160315	CA20072694477	20070912	GB201001666 A0	20100317	GB20100001666	20070912	GB2463843 A1	20100331	GB20100001666	20070912	GB2463843 B2	20120815	GB20100001666	20070912	IN00446KN2010 A	20100514	IN2010KN00446	20100204	MX2010000507 A1	20100409	MX20100000507	20070912	US2009013617 AA	20090115	US20070776714	20070712	US2011126700 AA	20110602	US20100926577	20101126	US7849641 BB	20101214	US20070776714	20070712	WO09006723 A1	20090115	WO2007CA01618	20070912
Publication number	Publication date	Application number	Application date																																																										
AU2007356411 AA	20090115	AU20070356411	20070912																																																										
AU2007356411 BB	20120315	AU20070356411	20070912																																																										
CA2694477 AA	20100112	CA20072694477	20070912																																																										
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GB2463843 A1	20100331	GB20100001666	20070912																																																										
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MX2010000507 A1	20100409	MX20100000507	20070912																																																										
US2009013617 AA	20090115	US20070776714	20070712																																																										
US2011126700 AA	20110602	US20100926577	20101126																																																										
US7849641 BB	20101214	US20070776714	20070712																																																										
WO09006723 A1	20090115	WO2007CA01618	20070912																																																										
Probable Assignee:	THOR GLOBAL ENTERPRISES LTD																																																												
Assignee(s):(std):	JOHANNSEN THORKIL J ; THOR GLOBAL ENTPR LTD																																																												
Assignee(s):	THOR GLOBAL ENTERPRISES LTD																																																												
Inventor(s):(std):	JOHANNSEN THORKIL J																																																												
Inventor(s):	THORKIL J JOHANNSEN																																																												
Agent(s):	MALLESONS STEPHEN JAQUES; KING AND WOOD MALLESONS; MINTER ELLISON; OSLER HOSKIN AND HARCOURT LLP; VOLPE AND KOENIG PC; RIDOUT AND MAYBEE LLP																																																												
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International class (IPC 8-9):	B65G21/10 B65G41/00 C09K8/54 C23F11/04 C23F11/16 C23F11/167 E04H12/34 F01B1/00 F16M11/26 (Advanced/Invention); B65G21/00 C09K8/54 C23F11/04 C23F11/10 E04H12/00 F16M11/20 (Core/Invention)																																																												
International class (IPC 1-7):	B65G21/00 B65G21/10 F16M11/26																																																												
CPC:	B65G41/002 C23F11/04 C23F11/16 C23F11/162 C23F11/167 C23F11/1673 B65G41/00 B65G41/008 B65G21/14 C09K8/54																																																												
European class:	B65G21/14 B65G41/00A2 B65G41/00D2 C09K8/54 C23F11/04 C23F11/16 C23F11/167 C23F11/167B C23F11/16D																																																												
US class:	198/313 414/505 414/574 414/787 52/118 52/118P 52/121 92/146 92/146P																																																												
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Forward Citations:	WO14149117, US9488014, US8925718, US8006831, US2014251768, US2011126700, GB2479181, GB2479181, CN103508159,																																																												

Abstract:
A telescopic undercarriage for raising and lowering a frame. The undercarriage includes a base section having a pair of parallel base legs extending from a first end to a second end of the base section, the base section including a first plurality of braces extending between respective upper surfaces of the base legs and a second plurality of braces extending between respective lower surfaces of the base legs, the base legs, first plurality of braces and second plurality of braces collectively providing an elongate central base section passage. The undercarriage also includes an extendable section slidably disposed within the base section passage and having opposed legs, a drive system for extending and retracting the extendable section relative to the base section.



Title: CONTAINED DRIVE SYSTEM FOR CHAIN CONVEYOR BELT TO REDUCE CATENARY SAG

Priority: US20070950659P 20070719 US20080175531 20080718

Family:

	Publication number	Publication date	Application number	Application date
	US2009020397 AA	20090122	US20080175531	20080718
	US7874419 BB	20110125	US20080175531	20080718

Probable Assignee: DORNER MFG CORP

Assignee(s):(std): DORNER MFG CORP

Assignee(s): GOVERNOR AND CO OF BANK OF IRELAND COLLATERAL AGENT AS ; MADISON CAPITAL FUNDING LLC AGENT AS

Inventor(s):(std): HAU PAUL ; HOSCH MICHAEL A

Agent(s): ANDRUS SCEALES STARKE AND SAWALL LLP

International class (IPC 8-9): B65G15/00 B65G17/00 (Advanced/Invention); B65G15/00 (Core/Invention)

CPC: B65G21/06 B65G21/105 B65G21/20

European class: B65G21/06 B65G21/10B B65G21/20

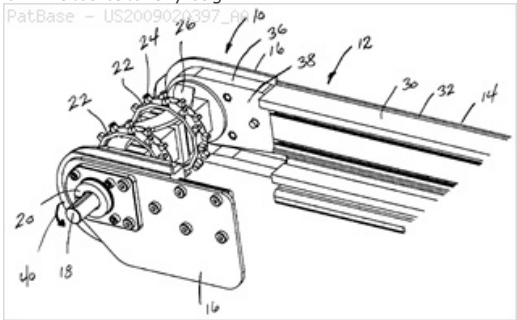
US class: 198/832 198/837 198/841 198/860.1

[Classification Explorer](#)

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Forward Citations: WO17062432, WO14070000, WO11106845, US9783368, US9611098, US9457959, US8925718, US2017190512, US2017183163, NL2009722, DE102013215751, AU2010200824,

Abstract:
A conveyor frame assembly for use with a conveyor belt formed from individual links each joined together at pivot points. The conveyor frame assembly includes a drive assembly that pulls the conveyor belt around a drive roller to transition between the upper and lower runs of the conveyor belt. The drive end includes a support block that encloses the side edges of the conveyor belt as the conveyor belt transitions over the drive sprockets. The side frame members each include a continuous retaining channel having a height greater than the thickness of the conveyor belt. The retaining channels formed on opposite sides of the conveyor frame assembly allow the lower run of the conveyor belt to "tent" by creating an angle between adjacent links of the conveyor belt assembly. The tenting of the lower run of the conveyor belt eliminates catenary sag.

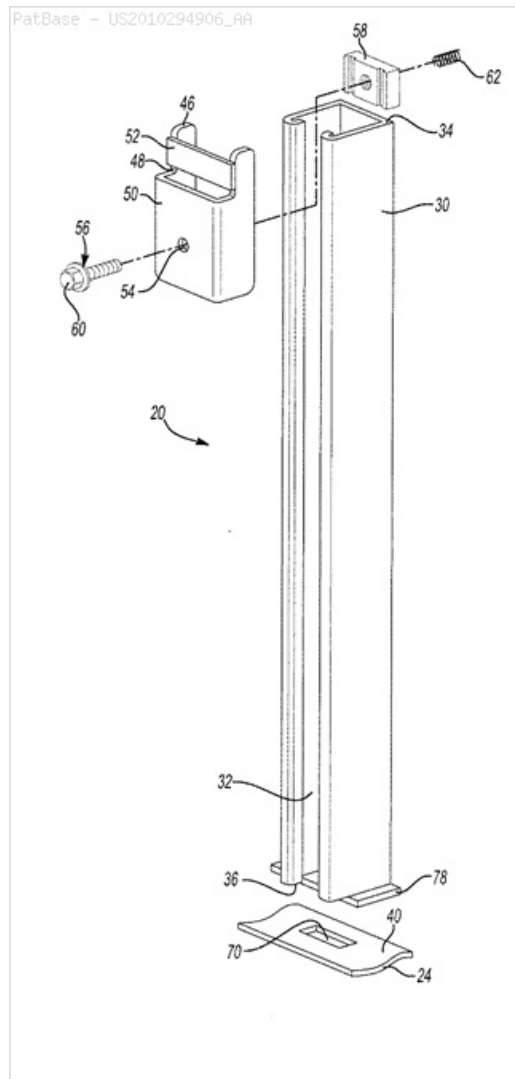


Title: UNIVERSAL FRAMING CHANNEL MOUNTING BRACKET**Priority:** US20090470642 20090522 US20100783605 20100520

Family:	Publication number	Publication date	Application number	Application date
	CA2704955 AA	20101122	CA20102704955	20100520
	US2010294906 AA	20101125	US20090470642	20090522
	US2010296860 AA	20101125	US20100783605	20100520
	US8562241 BB	20131022	US20100783605	20100520

Probable Assignee: JERVIS B WEBB CO**Assignee(s):(std):** KLEPACK DANIEL J ; LECROY DONALD ; WEBB CO JERVIS B**Assignee(s):** JERVIS B WEBB CO ; JERVIS B WEBB COMPANY**Inventor(s):(std):** KLEPACK DAN ; KLEPACK DANIEL J ; LECROY DONALD**Agent(s):** DICKINSON WRIGHT PLLC**International class (IPC 8-9):** A47F5/08 B23P11/00 B65G21/00 B65G21/10 F16B1/00 F16B9/00 F16M13/02 (Advanced/Invention)**CPC:** Y10T29/49826 Y10T403/18 Y10T403/4691 B65G21/06 B65G21/02 F16B37/046**European class:** B65G21/02 B65G21/06 F16B37/04E1**US class:** 198/860.1 248/231.9 248/231.900P 248/309.1 248/309.100S 248/694 248/694S 29/428 29/428S 403/24 403/24P 403/262[Classification Explorer](#)**Cited documents:** US7261274 BB, US7240459 BB, US7178665 BB, US7021590 BB, US6830146 BA, US6427831 BA, US6343446 BA, US5762178 A, US5414967 A, US5351926 A, US5314156 A, US5307600 A, US5297888 A, US5228252 A, US5188479 A, US5178263 A, US5174532 A, US5160107 A, US4948313 A, US4926592 A, US4919056 A, US4895331 A, US4840525 A, US4830531 A, US4822199 A, US4789286 A, US4787767 A, US4784552 A, US4778092 A, US4736835 A, US4342177 A, US4130977 A, US4068440 A, US4018020 A, US3888441 A, US3604563 A, US3581877 A, US3017153 A, US2589228 A, US2345650 A, US2008229699 AA, US2008072525 AA, US2008041693 AA, US2006237292 AA, US2004262120 AA, US2002148709 AA, US2002116891 AA, US2001054545 AA,**Forward Citations:** USD805881, USD805375, USD789775, US9914591, US9527672, US8925718, US8132772, US2015210478, US2014251768,**Abstract:**

An attachment system for securing conveyor components to a conveyor disposed between a pair of side guards. The side guards are U-shaped and have first and second side guard ends that extend perpendicularly from the opposite ends of a flat wall portion to a distal end. The first side guard end includes a first lip that defines a grooved portion. At least one framing channel extending between flat first and second channel ends is disposed between the first and second side guard ends. The first channel end includes a projection portion that extends from the first channel end to engage to the grooved portion of the side guard to secure the first channel end adjacent the first side guard end.



Title: MODULAR STRUCTURAL FRAMING SYSTEM**Priority:** US20090218660P 20090619 US20100819582 20100621 WO2010US39326 20100621
US20120653993 20121017

Family:	Publication number	Publication date	Application number	Application date
	AU2010262948 AA	20101223	AU20100262948	20100621
	CA2765472 AA	20111214	CA20102765472	20100621
	EP2443297 A1	20120425	EP20100790315	20100621
	EP2443297 A4	20150325	EP20100790315	20100621
	JP2012530860 T2	20121206	JP20120516367T	20100621
	JP5681709 B2	20150311	JP20120516367T	20100621
	US2010319277 AA	20101223	US20100819582	20100621
	US2013036685 AA	20130214	US20120653993	20121017
	US8291653 BB	20121023	US20100819582	20100621
	WO10148387 A1	20101223	WO2010US39326	20100621

Probable Assignee: UNIRAC INC**Assignee(s):(std):** DEVITT LAURA ; HARRIS STACY ; MEIER CHRIS M ; SUAREZ JUAN ; UNIRAC INC ; WEBB JIM**Inventor(s):(std):** DEVITT LAURA ; HARRIS STACY ; MEIER CHRIS M ; SUAREZ JUAN ; WEBB JIM ; MEIER CHRIS**Agent(s):** PETER MAXWELL AND ASSOCIATES; BENNETT JONES LLP; CHARLTON PETER JOHN; WILMERHALE/DC; WILMERHALE DC; CROWELL AND MORING LLP; LEE JEFFREY C ET AL**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU 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**International class (IPC 8-9):** E02D27/00 E04B7/00 E04B7/18 E04C3/00 E04C3/04 E04D13/18 E04H14/00 E04H5/00 F24J2/52 H01L31/042 H01L31/048 H02S20/10 H02S20/23 H02S20/24 H02S30/10 (Advanced/Invention)**CPC:** Y02B10/12 Y02E10/47 F24S25/636 F24S25/10 F24S25/12 F24S25/13 F24S25/16 F24S25/617 F24S25/65 F24S25/70 F24S2025/02 F24S2025/803**European class:** F24J2/52A20B8 F24J2/52A20D F24J2/52A8 F24J2/52A8B F24J2/52A8C F24J2/52A8F R24J2/52P22 Y02B10/12 Y02E10/47**US class:** 248/237 248/237S 52/173.3 52/173.300P 52/292 52/296 52/650.1 52/650.100S 52/653.1[Classification Explorer](#)**Cited documents:** WO09095273 A1, WO05111329 A1, USD671885 S1, US8101849 BB, US7849849 BB, US7814899 BA, US6782668 BB, US6465724 BA, US6205719 BA, US5992121 A, US5228924 A, US5143556 A, US4269173 A, US2011173900 AA, US2010132286 AA, US2009025314 AA, US2008053014 AA, US2004163338 AA, KR20090010605 A, JP8170790 A2, JP8170790, JP7238597 A2, JP7238597, JP6043169 U, JP6043169 U, JP2001107518 A2,

DE102004044103 A1

Forward Citations: WO17065466, WO17065465, WO14073999, USD801915, USD801914, USD801913, USD799420, USD792342, US9937846, US9800201, US9660569, US9657967, US9655292, US9641123, US9628019, US9523517, US9462734, US9453660, US9444396, US9352941, US9343592, US9263985, US9249994, US9145906, US9117951, US9080792, US9003726, US8925718, US8776454, US8661748, US8661747, US8464496, US8336277, US8316619, US8316618, US8307606, US2016261225, US2015034145, US2014290716, US2014284292, US2014251768, US2014109953, US2014048124, US2013068275, US2013008103, US2012312947, US2012272613, US2012131865, US2012031471, KR101609543, KR101609540, JP2014103334, CN103973207, BE1023970,**Abstract:**

The present invention generally relates to a modular, structural framing system.



Title: MODULAR CONVEYOR SYSTEM AND METHOD
Priority: US20090567960 20090928
Family:

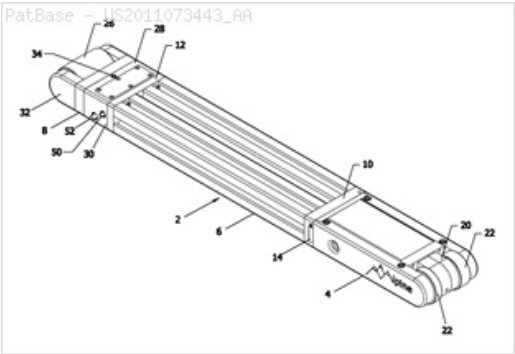
	Publication number	Publication date	Application number	Application date
	US2011073443 AA	20110331	US20090567960	20090928
	US8011498 BB	20110906	US20090567960	20090928

Probable Assignee: TRIVETTE ROGER BLAINE
Assignee(s):(std): TRIVETTE ROGER BLAINE
Inventor(s):(std): TRIVETTE ROGER BLAINE
Agent(s): MONAHAN AND MOSES LLC; THOMAS L
International class (IPC 8-9): B65G21/10 B65G23/44 (Advanced/Invention)
CPC: B65G21/06 B65G23/22 B65G23/44
European class: B65G21/06 B65G23/22 B65G23/44
US class: 198/813 198/860.2 198/861.1

[Classification Explorer](#)

Cited documents: US7681719 BB, US6935487 BB, US6036003 A, US5947264 A, US5947263 A, US5692597 A, US5609238 A, US5174435 A, US5096045 A, US4993542 A, US4925009 A, US4881633 A, US4799584 A, US2951580 A, DE4136154 A1,
Forward Citations: WO17108048, WO13072066, US9108802, US8925718, US8684171, CN102976043, CH706033,

Abstract:
A low profile, portable, modular conveyor system is provided. The conveyor system includes three main components: a drive end, having a motor and gearboxes used to drive a pair of drive wheels, a center section, and an idle section comprising a stationary component attached to the center section and a pivoting component allowing the distal portion of the idle end to pivot in a transverse direction. The conveyor system includes means for hydraulically or mechanically adjusting the tension and tracking of the conveyor belt. The drive end may be removed from the conveyor system in a transverse direction relative to the longitudinal direction of the conveyor system.



Title:PORTABLE BELT CONVEYOR SYSTEM

Priority:US20100403277P 20100913US20110199754 20110908US20140487965 20140916US20150868730 20150929US20170607664 20170529

Family:	Publication number	Publication date	Application number	Application date
	US2012138423 AA	20120607	US20110199754	20110908
	US2015001039 AA	20150101	US20140487965	20140916
	US2016016736 AA	20160121	US20150868730	20150929
	US2017260006 AA	20170914	US20170607664	20170529
	US8833539 BB	20140916	US20110199754	20110908
	US9156617 BB	20151013	US20140487965	20140916
	US9694985 BB	20170704	US20150868730	20150929

Probable Assignee: SUPERIOR IND INC

Assignee(s):(std): BERLINGER BRUCE J ; FEHR CORBIN J ; FELTON JARROD J ; SUPERIOR IND

Assignee(s): SUPERIOR IND LLC ; SUPERIOR IND INC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std): FELTON JARROD J ; FEHR CORBIN J ; BERLINGER BRUCE J

Agent(s): DICKE BILLIG AND CZAJA PLLC

International classB65G15/26 B65G21/14 B65G39/16 B65G41/00 (Advanced/Invention);B65G39/16 (Advanced/Non-invention)

IPC 8-9):

CPC:B65G21/14 B65G41/008 B65G15/26 B65G39/16

European class:B65G21/14 B65G41/00D2

US class:1/1 198/313 198/632 198/812 198/830 29/428

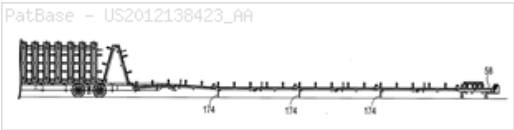
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Cited documents:US9156617 BB, US7823715 BB, US7308968 BB, US6708814 BB, US5181600 A, US4260053 A, US4050542 A, US3825107 A, US2823715 A, US2678125 A, US2576217 A,

Forward Citations:US9694985, US9598240, US9597690, US8925718, US2016199850, US2016176646, CN103318628,

Abstract:

A belt conveyor system for creating an overland material transport assembly on a ground surface comprises a frame configured for transportation over the ground surface, a plurality of pivotally connected conveyor belt support sections, a head pulley assembly mounted to the first end of the frame, a tail pulley assembly mounted to one of the conveyor belt support sections, and a conveyor belt. The plurality of pivotally connected conveyor belt support sections are supportable on the frame in a transport configuration wherein the plurality of support sections are accordion-folded relative to one another. The plurality of pivotally connected conveyor belt support sections are movable to a material transport configuration wherein the plurality of support sections are unfolded.



Title:

IMAGE FORMING APPARATUS

Priority:

JP20110042705 20110228

Family:

	Publication number	Publication date	Application number	Application date
	JP2012181257 A2	20120920	JP20110042705	20110228
	JP5338827 B2	20131113	JP20110042705	20110228
	US2012219316 AA	20120830	US20120406960	20120228
	US8611790 BB	20131217	US20120406960	20120228

Probable Assignee:

BROTHER IND LTD

Assignee(s):(std):

BROTHER IND LTD ; SOUDA MAKOTO

Assignee(s):

BROTHER KOGYO KABUSHIKI KAISHA ; BROTHER KOGYO KK

Inventor(s):(std):

MUNEDA MAKOTO ; SOUDA MAKOTO

Agent(s):

BANNER AND WITCOFF LTD

International class (IPC 8-9):

G03G15/00 G03G15/16 G03G21/18 (Advanced/Invention)

CPC:

G03G15/161 G03G21/1619 G03G2215/0132 G03G2221/1684 G03G2221/1869

European class:

G03G15/16A1 G03G21/16A3 S03G215/01P3N1V S03G221/16S2 S03G221/18P3B

US class:

198/860.1 198/860.2 399/107 399/107P 399/110 399/110S 399/111 399/111S 399/121 399/121S 399/297 399/308

Classification Explorer

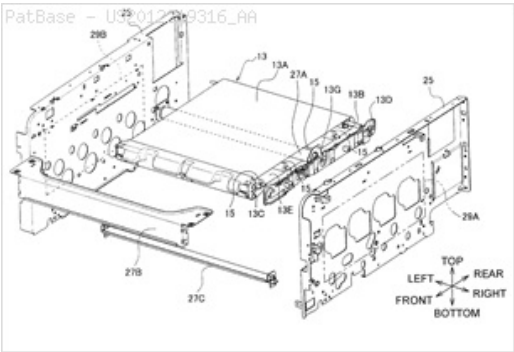
Cited documents:

US2011064464 AA, US2010247198 AA, US2010247174 AA, US2007147891 AA, JP6258881 A2, JP2010231087 A2, JP2010060726 A2, JP2009294517 A2, JP2009237317 A2, JP2007101728 A2, JP2006251524 A2, JP2005242124 A2, JP2002148879 A2,

Forward Citations:

US9815640, US9428353, US9261853, US9229419, US9207627, US9195209, US9195206, US9195205, US9188943, US9188942, US9188939, US9188935, US9182729, US8925718, US2015177680, US2014251768, JP2014211514,

Abstract:
An image forming apparatus is provided which includes an image forming unit, a main body having a pair of frames, a pair of rollers, a belt which is endless, and a reinforcing member. The frames are disposed to sandwich the image forming unit therebetween. The rollers are spaced apart from each other such that an axial direction of each of the rollers extends in a direction perpendicular to the frames. The belt extends around the rollers. The reinforcing member is disposed in an area enclosed by the belt. One end of the reinforcing member is fixed to one of the frames, and the other end of the reinforcing member is fixed to the other one of the frames.

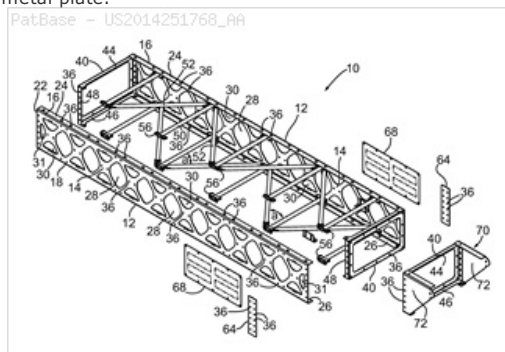


Title: MODULAR SUPPORT SYSTEM**Priority:** US20130788192 20130307**Family:**

	Publication number	Publication date	Application number	Application date
■	US2014251768 AA	20140911	US20130788192	20130307
■	US8925718 BB	20150106	US20130788192	20130307

Probable Assignee: ENGINEERINGOLOGY INC**Assignee(s):(std):** ENGINEERINGOLOGY INC**Inventor(s):(std):** GARBATY MICHAEL JOHN ; GUTTA KAMALAKAR ; MILES WILLIAM KEITH ; WILSON DOUGLAS JAMES**Agent(s):** GIFFORD KRASS SPRINKLE ANDERSON AND CITKOWSKI PC**International class** B65G21/14 B65G41/00 (Advanced/Invention)**(IPC 8-9):****CPC:** B65G21/06**US class:** 198/860.1 198/860.2 198/861.1[Classification Explorer](#)**Cited documents:** US8611790 BB, US8562241 BB, US8291653 BB, US8136804 BB, US8011498 BB, US7874419 BB, US7849641 BB, US7837030 BB, US7784597 BB, US7673741 BB, US7618231 BB, US7469782 BB, US7357238 BB, US7284947 BA, US7178665 BB, US7128201 BB, US6929113 BA, US6854397 BB, US6705461 BB, US6698584 BA, US6453657 BA, US6427831 BA, US6302265 BA, US6056252 A, US5715931 A, US5598784 A, US5529171 A, US5421451 A, US5377810 A, US5203442 A, US5188479 A, US5178263 A, US5174439 A, US5131531 A, US4951809 A, US4811829 A, US4763702 A, US4760913 A, US4724953 A, US4524864 A, US4467914 A, US2012138423 AA, US2005211534 AA,**Forward Citations:** US9776800, US9440794, US2016167885, US2015329293,**Abstract:**

A modular support system has individual frame modules each of which is formed by a series of standardized components that are secured together to form a generally elongate support structure for various uses, in particular a support structure for a conveyor. A truss frame module and a channel frame module are disclosed wherein both of the frame modules include a pair of elongate side frame members that are laterally spaced-apart and generally parallel, these frame members being secured together by a series of laterally-extending and transverse frame members. Specialized connectors attach to the ends of the laterally-extending and transverse frame members, which in turn are secured to the frame members. The components of each of the frame modules are substantially identical to the other so that they can be inverted or reversed without affecting assembly of the frame. The side frame members are made by profile cutting and roll forming an elongate metal plate.



Title:
Priority:
Family:

MODULAR CONVEYOR AND PROCEDURE FOR ASSEMBLING A MODULAR CONVEYOR
GB20130012910 20130719 WO2014DK50217 20140711

Publication number	Publication date	Application number	Application date
EP3022136 A1	20160525	EP20140739664	20140711
GB201312910 A0	20130904	GB20130012910	20130719
GB2516306 A1	20150121	GB20130012910	20130719
US2016167885 AA	20160616	US20140905932	20140711
US9776800 BB	20171003	US20140905932	20140711
WO15007289 A1	20150122	WO2014DK50217	20140711

Probable Assignee:
Assignee(s):(std):
Assignee(s):
Inventor(s):(std):
Inventor(s):
Agent(s):
Designated states:

AMMERAAL BELTECH MODULAR A S
AMMERAAL BELTECH MODULAR AS ; WYN DAVIES ALAN
AMMERAAL BELTECH MODULAR A S
ANDERSEN KENNETH WESTERGAARD ; WESTERGAARD ANDERSEN KENNETH
KENNETH WESTERGAARD ANDERSEN
TELLEFSEN JENS J; BERG HILL GREENLEAF RUSCITTI LLP; BRENT P; TELLEFSEN JENS
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

**International class
(IPC 8-9):**
CPC:
US class:

B65G17/08 B65G21/06 B65G21/10 B65G41/00 (Advanced/Invention)
B65G41/00 B65G17/08 B65G21/06 B65G2207/30
198/860.2 29/446

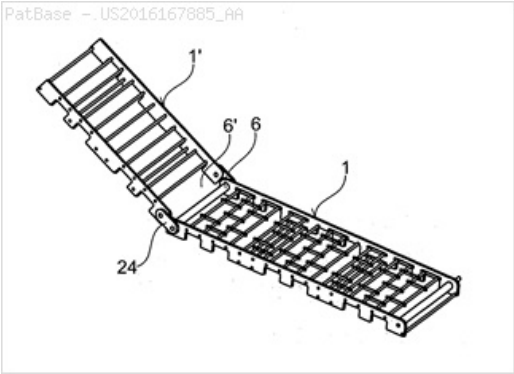
Cited documents:

US9394111 BB, US8925718 BB, US8186503 BA, US7946415 BB, US7604113 BB, US7562766 BB,
US7000759 BA, US6640966 BB, US6427831 BA, US6053307 A, US5988362 A, US5762178 A, US4930621
A, US4926009 A, US4724953 A, US4144965 A, US3605994 A, US2007029171 AA, EP0492058 A1,

DE202008009151 U1

CN102951413 A,

Abstract:
Modular conveyor (1) being assembled from a kit of standard components, said conveyor having a length, width and height, where the conveyor at least comprises:•a. four end side plates (2-5), where each end side plate is provided with an aperture (6) which aperture is suitable to accommodate a sprocket wheel axle (7,8);•b. two sprocket wheel axles (7,8), where at least one axle is suitable to be connected to drive means (9), where each axle may accommodate one or more sprocket wheels;•c. web elements (13), which elements are attachable to one side of the side plates (11,12), in order to keep pairs of side plates at a determined lateral distance, where said web elements further comprises means for supporting an endless conveyor belt;•d. an endless conveyor belt arranged around the sprocket wheels.



Title: CLOSED CONVEYOR BELT

Priority: BE20140000361 20140515 EP20150001417 20150512

Family:

Publication number	Publication date	Application number	Application date
EP2944587 A1	20151118	EP20150001417	20150512
EP3184472 A1	20170628	EP20170155179	20150512
US2015329293 AA	20151119	US20150712164	20150514
US9440794 BB	20160913	US20150712164	20150514

Probable Assignee: VEJOPIROX NAAMLOZE VENNOOTSCHAP

Assignee(s):(std): VEJOPIROX NV

Assignee(s): CLEAN CONVEYOR BELT BVBA ; VEJOPIROX NAAMLOZE VENNOOTSCHAP

Inventor(s):(std): GEYSEN ALEX JEAN J

Agent(s): KAMPHUIS ALBERTUS JOHANNES; PHILIPPAERTS YANNICK; YOUNG AND THOMPSON

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8-9): B65G15/28 B65G15/62 B65G21/08 B65G21/20 B65G23/04 B65G37/00 B65G39/12 B65G69/18 (Advanced/Invention)

CPC: B65G21/20 B65G37/00 B65G15/28 B65G23/04 B65G15/62 B65G21/08 B65G39/12 B65G69/181

US class: 1/1 198/563 198/835 198/841

[Classification Explorer](#)

Cited documents: US8925718 BB, US7673741 BB, US5762712 A, US5660283 A, US5400897 A, US5129508 A, US4674627 A, US4674626 A, US4321996 A, US4204595 A, US2012018283 AA, US2002139643 AA, JP2004051338 A2, GB1566549 A, EP1148002 A1, DE1041416 B,

Forward Citations: US9682646, US2016114714,

Abstract:
Closed conveyor belt with a housing (2) that encloses a conveyor belt (11) that can be set in motion by a drive, characterized in that both edges (22) of the conveyor belt (11), that extend in the direction of movement (P) of the conveyor belt, extend through the housing (2) by a protruding section (23) that extends through slots (24) provided to this end in the housing (2).

