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Leng

(54) **COMBINED AND UPRIGHT FILE STORAGE CABINET**

(76) Inventor: **Luhao Leng**, Fujian (CN)

Correspondence Address:
GREER, BURNS & CRAIN
300 S WACKER DR, 25TH FLOOR
CHICAGO, IL 60606 (US)

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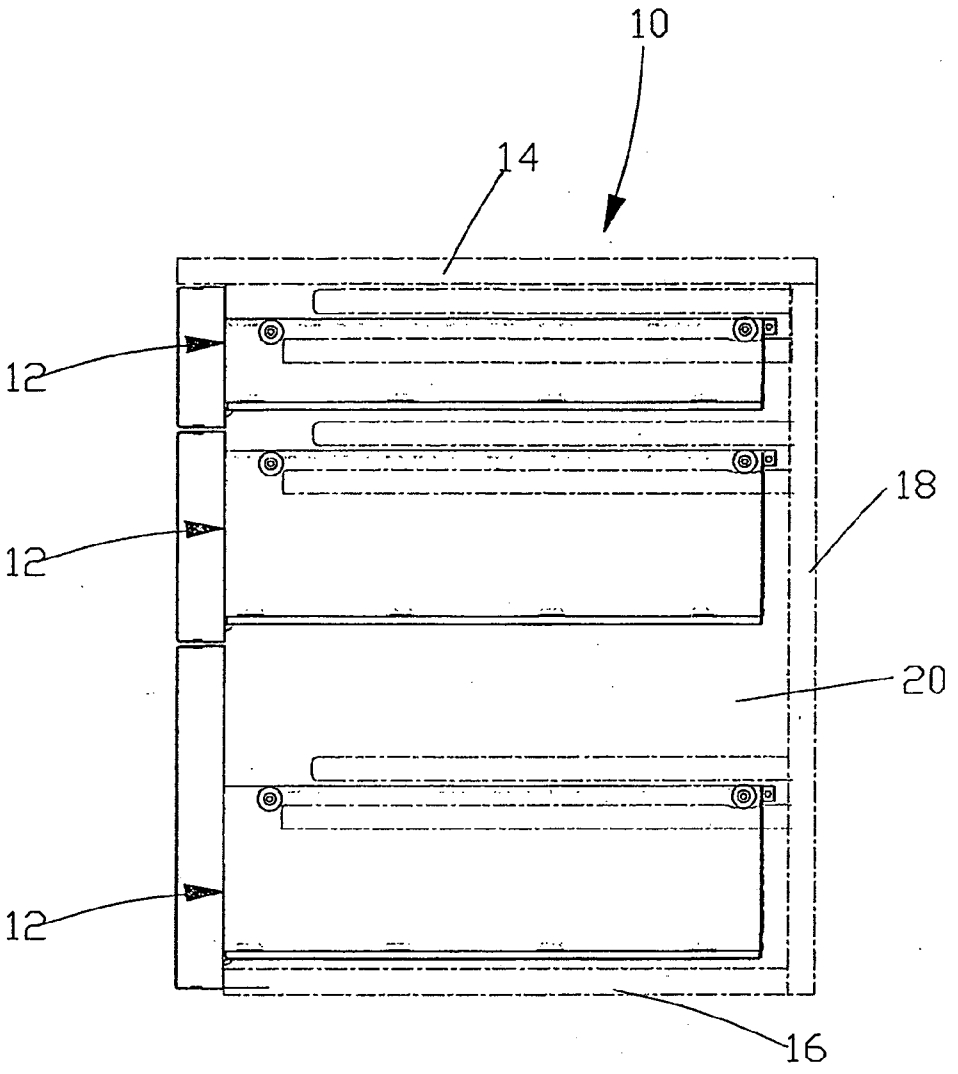
(57) **ABSTRACT**

A folding chair, including a first folding support and a second folding support, the first folding support includes a first front leg, a first back leg and a seat, the upper-end of the first front leg is pivotally connected to the lateral front-end of the seat, the first front leg is pivotally cross-linked with the first back leg, the lateral side of the seat is slidably and pivotally connected to the first back leg; the second folding support includes a second front leg, a second back leg and a second horizontal bearing-rod, connection of the second folding support is similar to that of the first folding support.



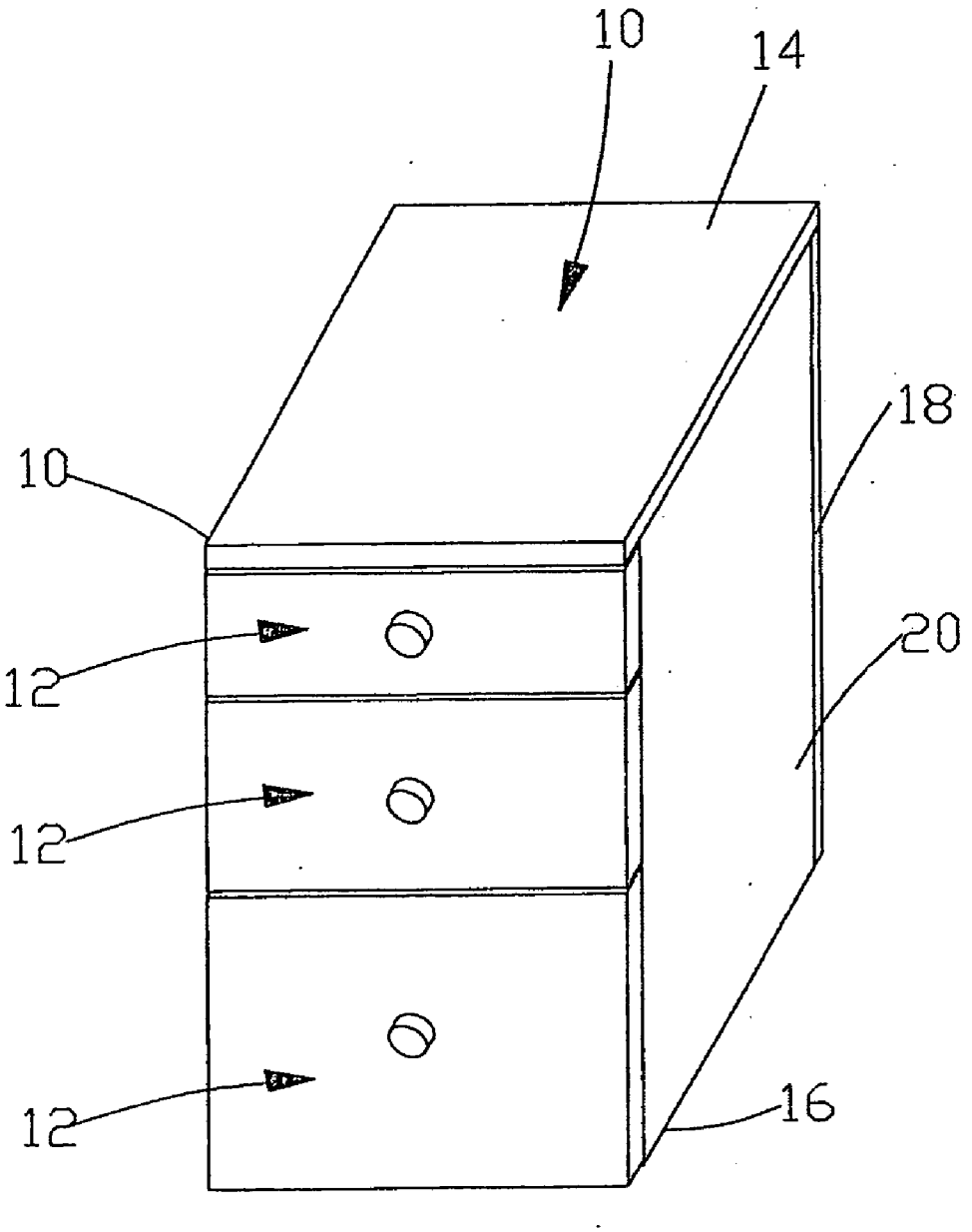


FIG. 1

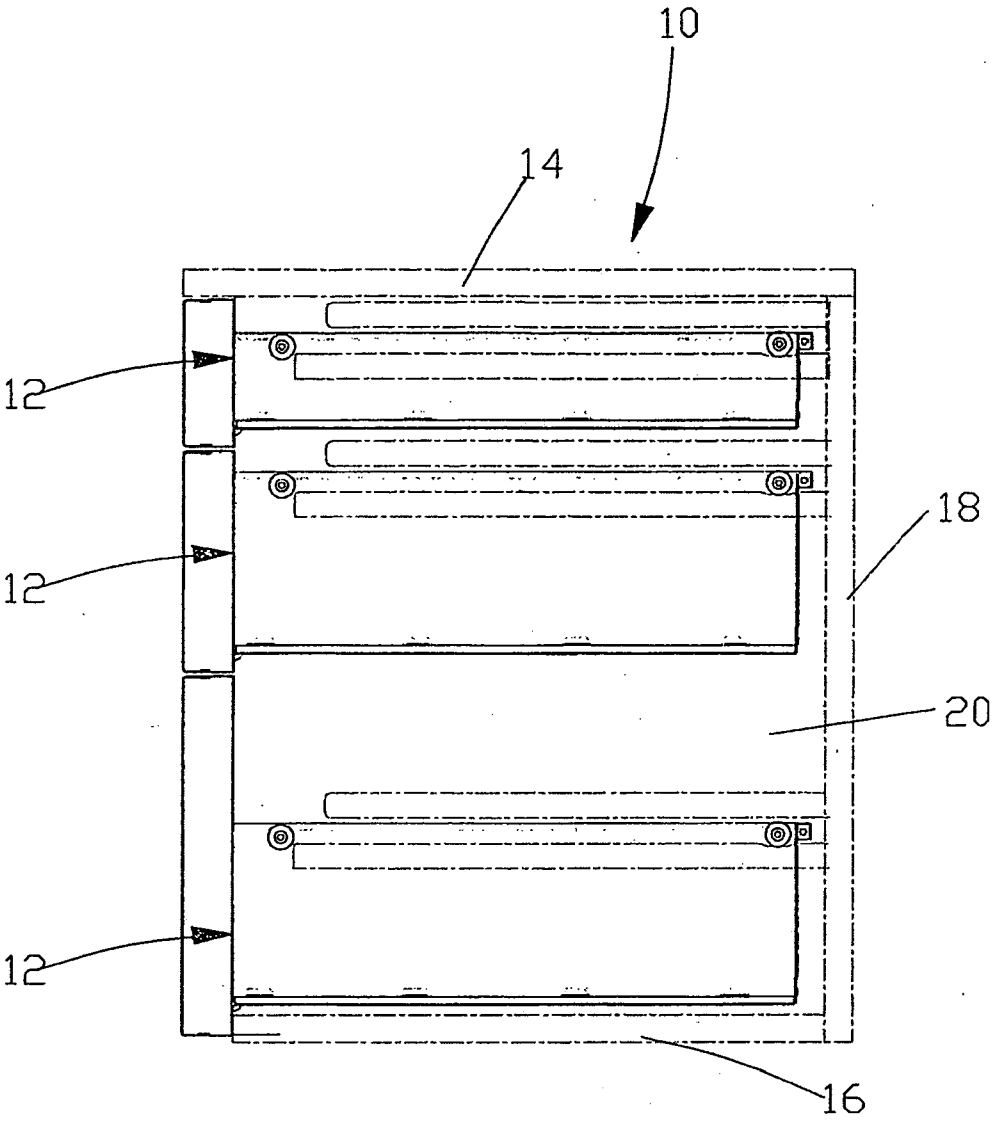


FIG. 2

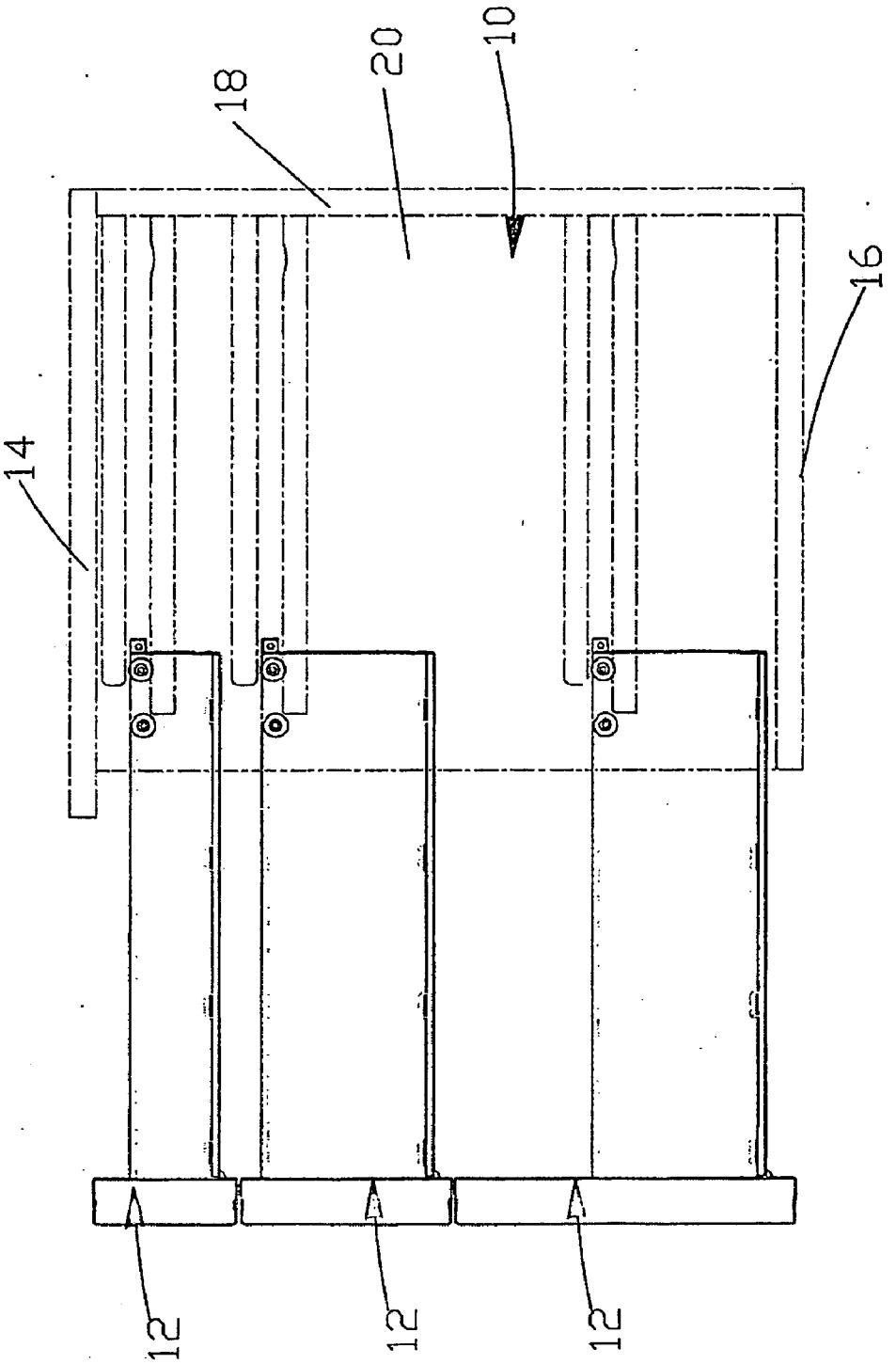


FIG. 3

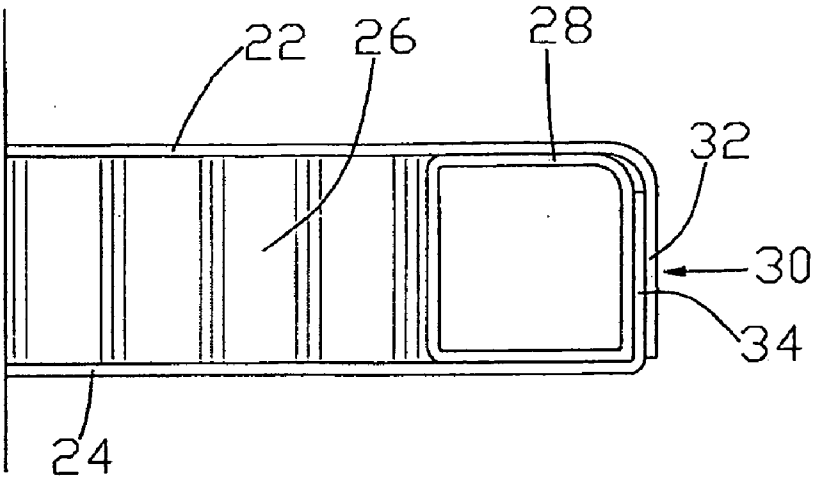


FIG. 4

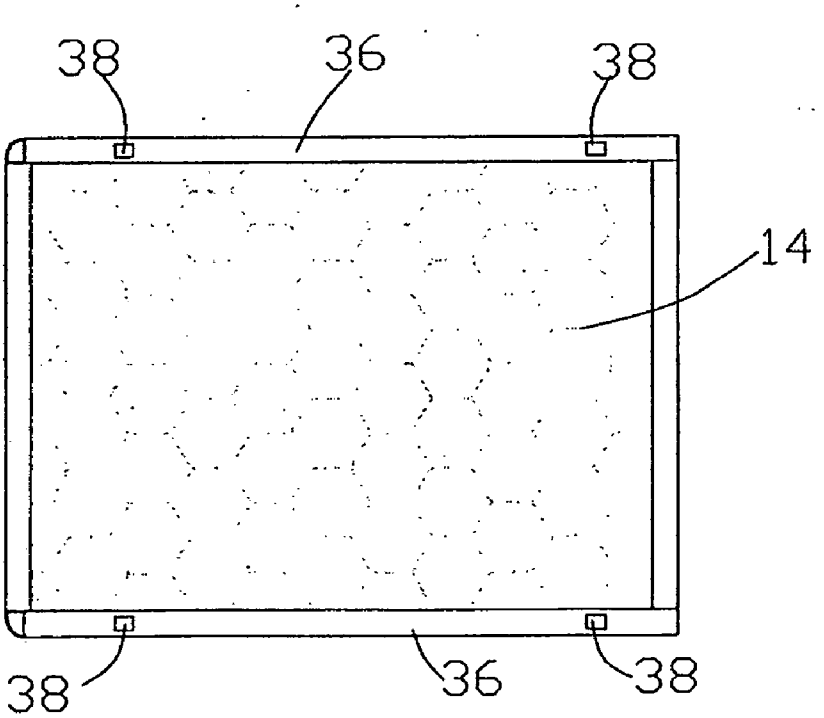


FIG. 5

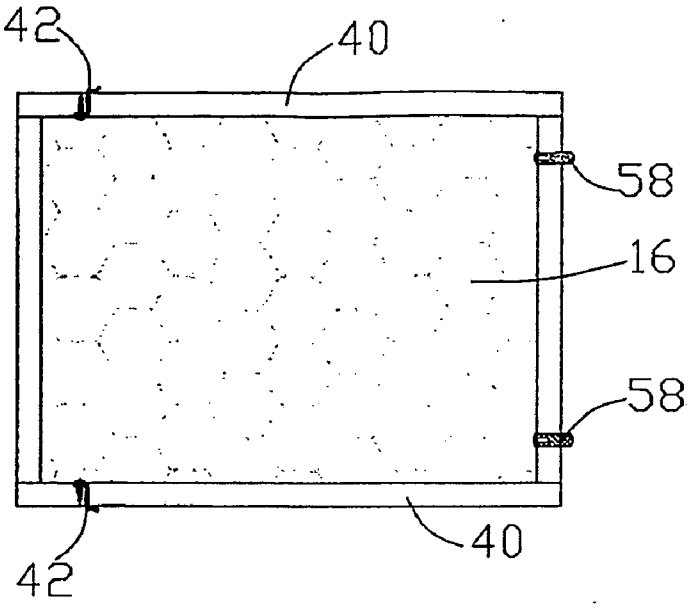


FIG. 6

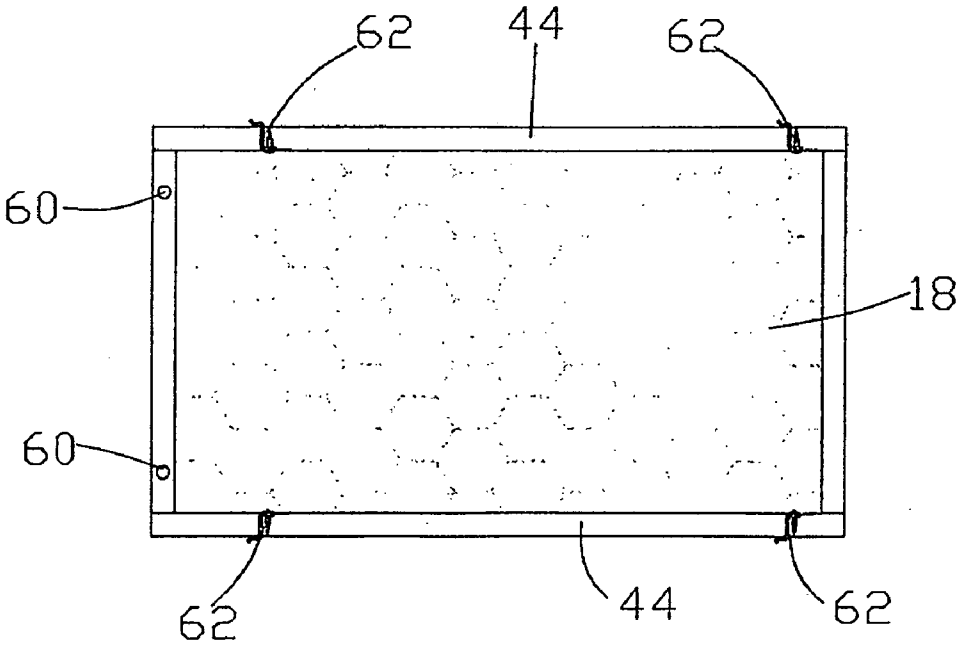


FIG. 7

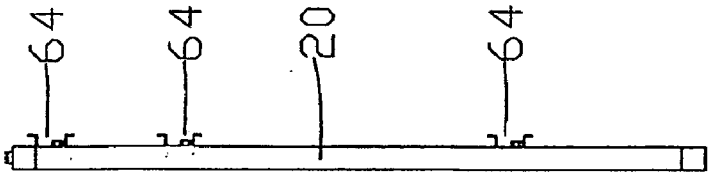


FIG. 9

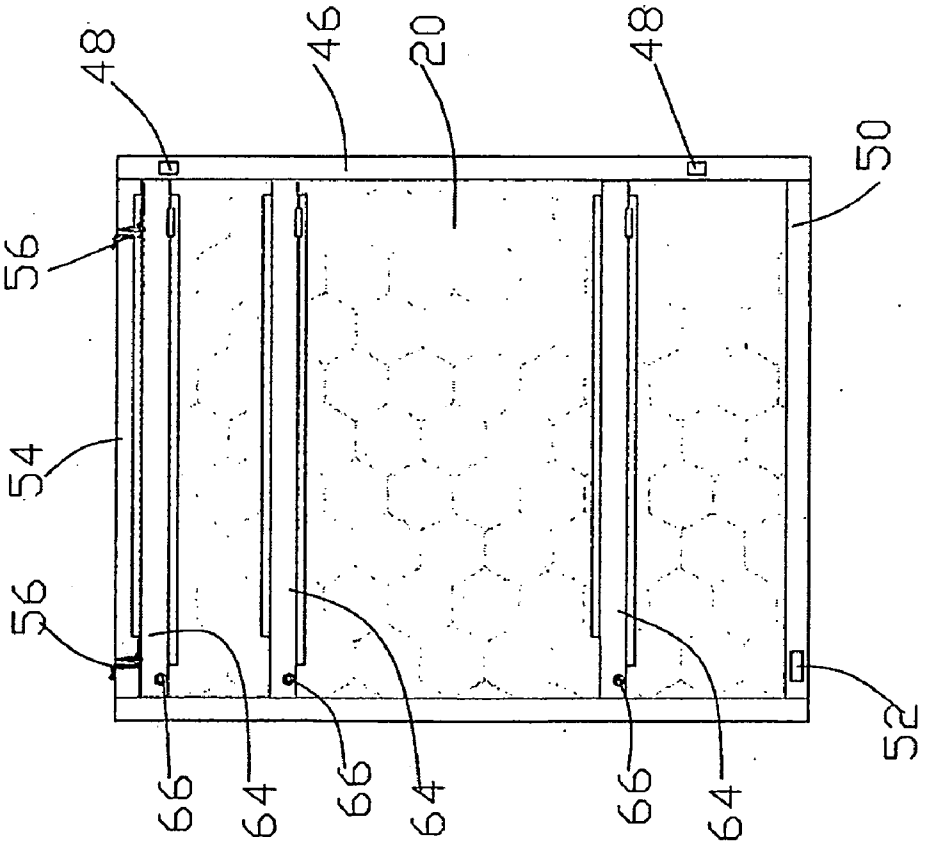


FIG. 8

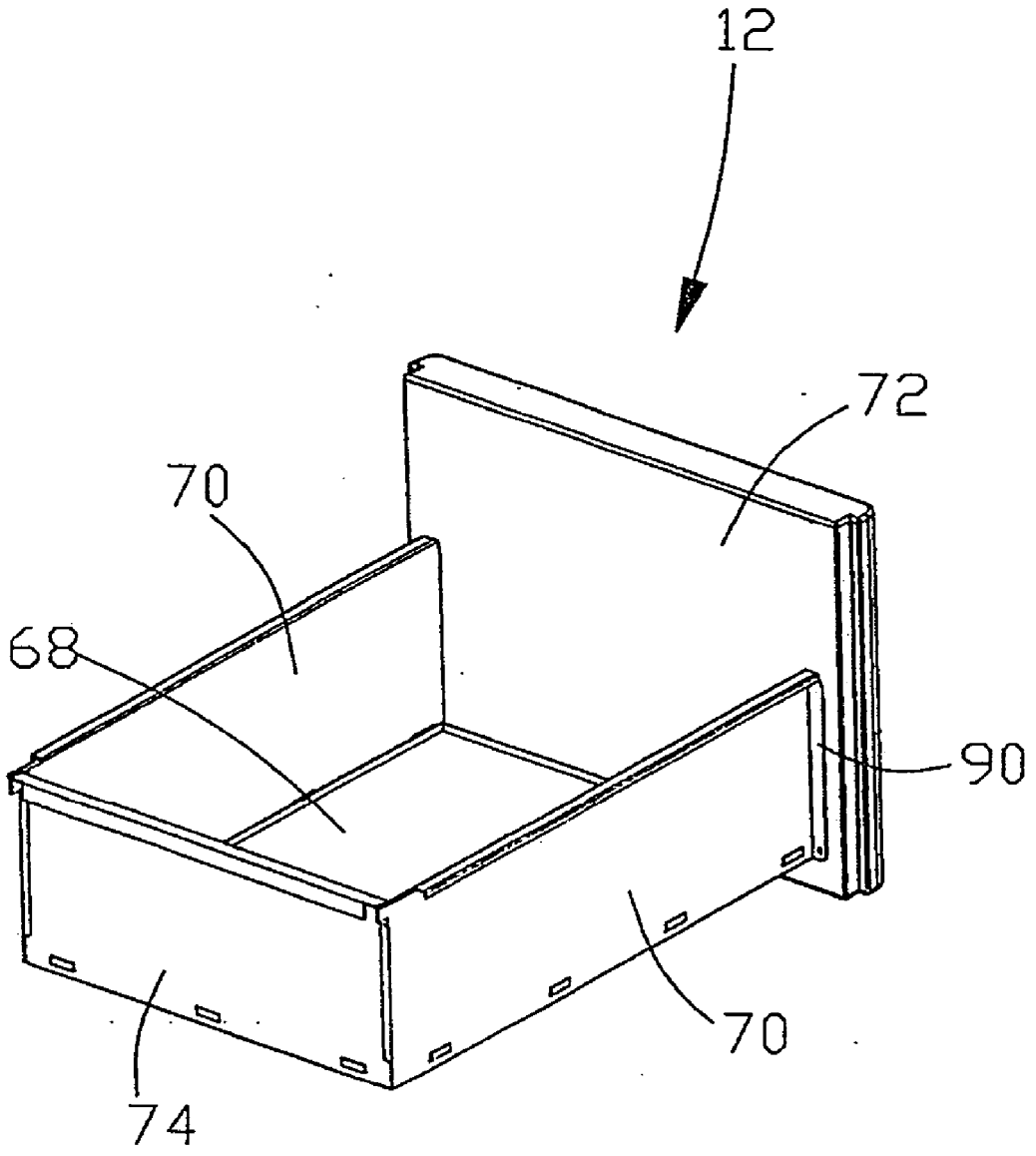


FIG. 10

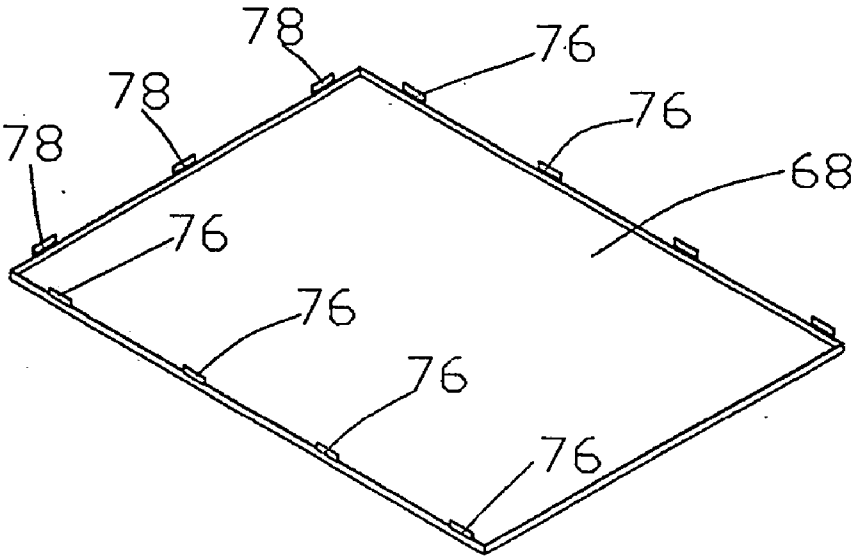


FIG. 11

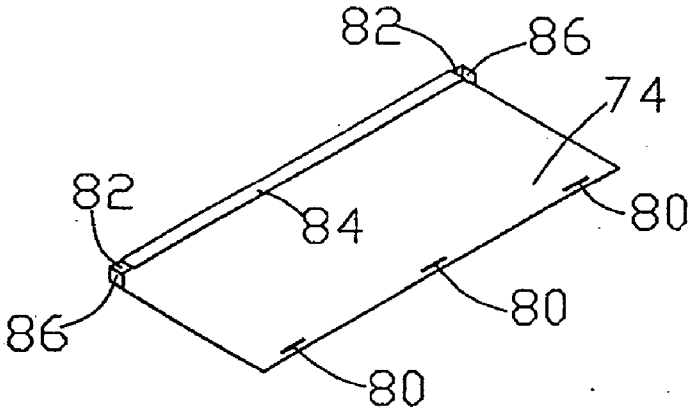


FIG. 12

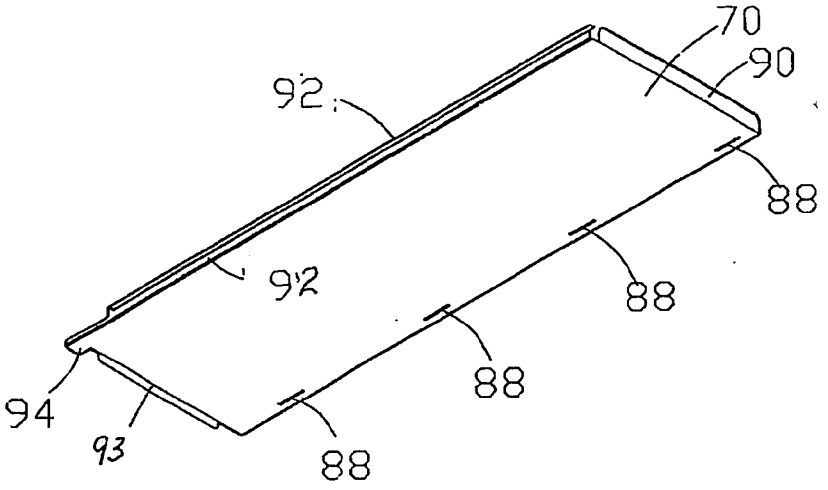


FIG. 13

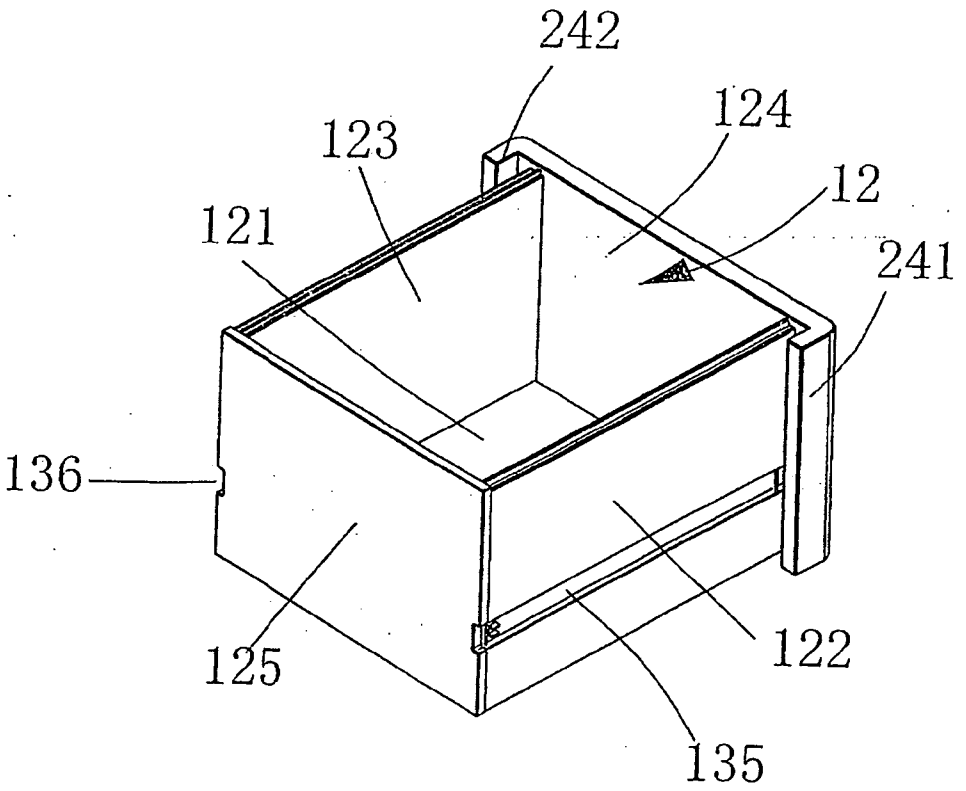


FIG. 14

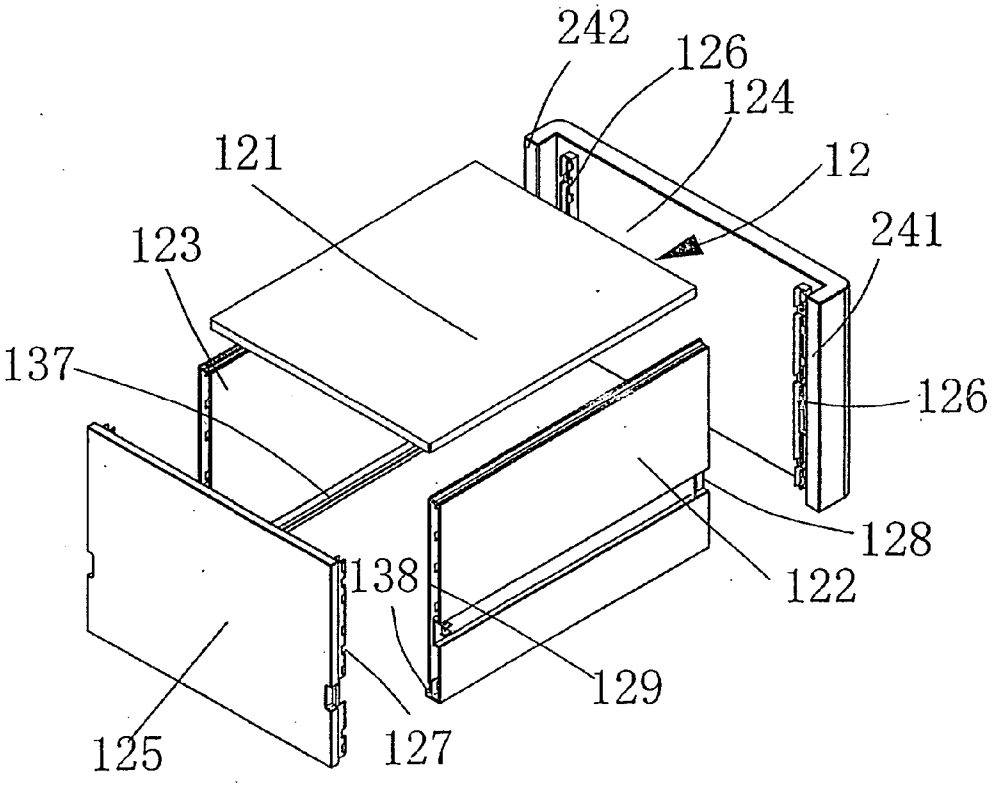


FIG. 15

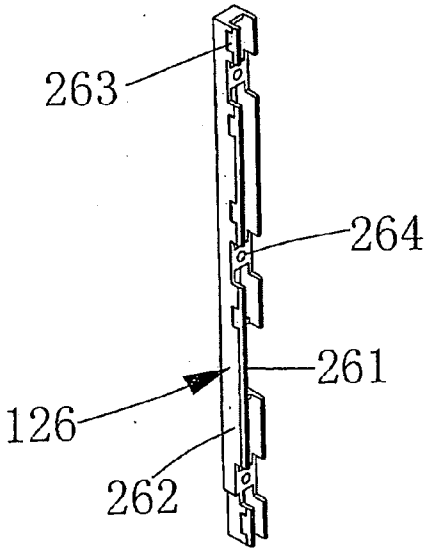


FIG. 16

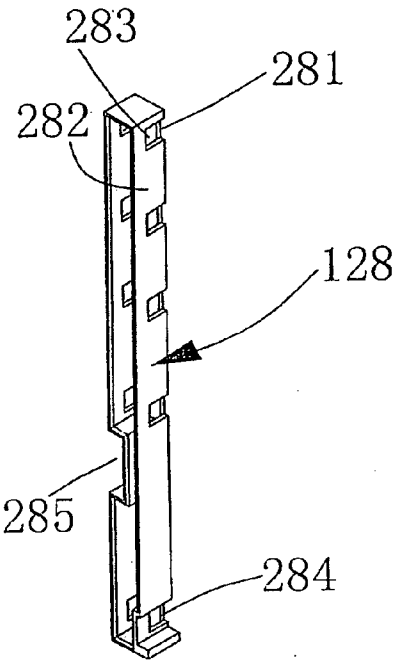


FIG. 17

COMBINED AND UPRIGHT FILE STORAGE CABINET

TECHNICAL FIELD

[0001] The present invention relates to a file cabinet, particularly to a combined and upright file cabinet constituted of some plastic composite boards.

BACKGROUND OF THE TECHNOLOGY

[0002] File cabinet is widely used at offices, bedchambers and so on because of its practicability. Existing file cabinets are mostly made by wood, which wastes much wood and destroys environment. So wood file cabinets are gradually replaced by plastic file cabinets. Existing plastic file cabinets have disadvantages as follows: firstly, plastic boards can not support great weight; secondly, adopting solid plastic boards will waste materials and have great weight; thirdly, file cabinets are no knock-down connection, which have great cubage, low connection intensity and bad sight.

CONTENT OF THE INVENTION

[0003] The purpose of the present invention is to solve the disadvantages of existing technology and to provide a combined and upright file cabinet of high connection intensity and disassembly and convenient connection.

[0004] The present invention adopts technical scheme as follows: A combined and upright file cabinet, comprising a file cabinet body constituted of an apical plate and a lateral plate and a backboard, some drawers which moveably link with the file cabinet body. Said file cabinet body and drawers are plastic composite boards; said plastic composite board consists of a faceplate, a soleplate, a perforated plate and a liner; the perforated plate is filled between the faceplate and the soleplate, the liner is sandwiched between the faceplate and the soleplate, and the liner entirely or interval partly covers the perforated plate along the periphery of the perforated plate.

[0005] The mutual connections of the plastic composite boards of the file cabinet body are knock-down hanging connection; said every two plastic composite boards of hanging connection: a first plastic composite board at least having a pair of sides inside embedded with liner as reinforcement pieces, a second plastic composite board at least having a pair of sides inside embedded with liner as reinforcement pieces, and the side reinforcement piece of the connection of the first plastic composite board and the second plastic composite board has buckle hole outside of the first plastic composite board, accordingly the reinforcement piece of the second plastic composite board has fastener protruding outside of the second plastic composite board; the first plastic composite board fixedly connects with the second plastic composite board by buckling the fastener into the buckle hole.

[0006] Said four sides of the lateral plate of the file cabinet body are all embedded with liners as reinforcement pieces to form reinforcement frame, which has several reinforcement poles in landscape orientation; runners are installed on the transverse reinforcement poles.

[0007] The file cabinet of the present invention is constituted of some hanging-connection plastic composite boards; the connection of every plastic composite board is knock-down, it ties up little room when in storage or transit. Reinforcement pieces are embedded into the plastic composite boards, which have beautiful appearance and are easy-machined and will not scrape users or their clothes. The reinforcement pieces have fasteners or buckle holes, which has high connection intensity. The first plastic composite board connect with the second plastic composite board by the fasteners and the buckle holes, which has high connection intensity.

[0008] Both the faceplate and the soleplate of said plastic composite board are plastic combined boards of inhale molding, the superposition sides of the faceplate and the soleplate locate on the side of the plastic composite board, the superposition side of the faceplate and the soleplate connect with each other by jointing or gluewater; plastic composite board is filled with paper honeycomb core or plastic honeycomb core or epispastic stuffing; or both the faceplate and the soleplate of the plastic composite board are plastic pieces, the circumferences of the faceplate and the soleplate are enwraped by enveloping regulas, plastic composite board is filled with paper honeycomb core or plastic honeycomb core or epispastic stuffing; or both the faceplate and the soleplate of the plastic composite board are single layer or multi-layer plastic boards made by inhale molding, the thickness of the plastic board is 0.3 to 4 mm. The plastic composite board of the invention has beautiful appearance and high intensity and low weight and low machining cost.

[0009] The surfaces of the faceplate and the soleplate of said plastic composite board are printed with printing layer of grain of wood or marbling or complexed with film layer of grain of wood or marbling. Which is beautiful and easy-producing.

[0010] The reinforcement pieces embedded into the plastic composite board are pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces. Which is easy-machining, low cost, high intensity and easy-connection.

[0011] The fasteners of the second plastic composite board fixedly connects with the reinforcement piece embedded into the second plastic composite board by jointing or rivet or screw thread. Which is easy-machining and high intensity.

[0012] Said fasteners are plastic hooks, L-shaped metal pieces, L-shaped sheet pieces or ladder-shaped pins; said buckle holes are rectangle holes or oblong holes or ladder holes; fasteners correspond with buckle holes. Which is easy-machining and has high connection intensity.

[0013] The fixed connection of the first plastic composite board and the second plastic composite board is "L" shape or "T" shape or "-" shape. Which has high intensity.

[0014] Said drawer is made up of five plates: a bottom side plate, a left side plate, a right side plate, a front side plate and a back side plate; said every two side plates of hanging connection: the first side plate has fastener and the second side plate has buckle hole to accept the fastener; the drawer is made up of a bottom side plate, a left side plate, a right side plate, a front side plate and a back side plate by fasteners hanging into buckle holes. which is easy-machining, has low cost and high connection intensity.

[0015] said drawer is made up of five plates: bottom drawer plate, left drawer plate, right drawer plate, front drawer plate, back drawer plate; two front insert-meet pieces are installed at two sides of the inner side of the front drawer plate, two back insert-meet pieces are installed at two sides of the inner side of the back drawer plate; correspondingly insert-meeted pieces are installed at front end side of the left and the right drawer plates; the left drawer plate and the right drawer plate fixedly connect with the front drawer plate and the back drawer plate by insert-meet pieces inserting into insert-meeted pieces; the downside of the inner side of the left drawer plate and the right drawer plate has fixed troughs, outside has runners; the bottom fixedly connect with the left drawer plate and the right drawer plate by inserting into the

fixed troughs. The drawer of the present invention is plastic composite board, which has high intensity and low weight.

[0016] The present invention has virtues as follows: firstly, the combined and upright file cabinet has high intensity and low weight and low cost; secondly, the connection of every plastic composite board has high intensity and is easy connection; thirdly, plastic composite boards of the combined and upright file cabinet have high intensity; fourthly, the connection of every plastic composite board is knock-down, it ties up little room when in storage or transit; fifthly, liners can be reinforcement pieces.

THE BRIEF INTRODUCTION OF THE ATTACHED DRAWINGS

[0017] FIG. **1** is the sketch map of three-dimensional structure of embodiment 1;

[0018] FIG. **2** is the front perspective view of the embodiment 1 when drawers and the file cabinet body are closed;

[0019] FIG. **3** is the front perspective view of the embodiment 1 when drawers and the file cabinet body are open;

[0020] FIG. **4** is the sketch map of part section plane of plastic composite board in embodiment 1;

[0021] FIG. **5** is the structural sketch map of apical plastic composite board in embodiment 1;

[0022] FIG. **6** is the structural sketch map of bottom plastic composite board in embodiment 1;

[0023] FIG. **7** is the structural sketch map of back plastic composite board in embodiment 1;

[0024] FIG. **8** is the structural sketch map of lateral plastic composite board in embodiment 1;

[0025] FIG. **9** is the left view of FIG. **8**;

[0026] FIG. **10** is the sketch map of three dimensional structure of drawer in embodiment 1;

[0027] FIG. **11** is the sketch map of three dimensional structure of bottom side plate of the drawer in embodiment 1;

[0028] FIG. **12** is the sketch map of three dimensional structure of back side plate of the drawer in embodiment 1;

[0029] FIG. **13** is the sketch map of three dimensional structure of the left and right side plates of the drawer in embodiment 1;

[0030] FIG. **14** is the sketch map of three dimensional structure of drawer in embodiment 2;

[0031] FIG. **15** is the sketch map of explosion diagram of drawer in embodiment 2;

[0032] FIG. **16** is the sketch map of insert-meet piece of drawer in embodiment 2;

[0033] FIG. **17** is the sketch map of insert-meeted piece of drawer in embodiment 2.

EMBODIMENTS

Embodiment 1

[0034] A combined and upright file cabinet, as FIGS. **1** to **3**, comprising a file cabinet body **10** and three drawers **12**, the three drawers **12** moveably link with the file cabinet **10**. The file cabinet body **10** comprises an apical plastic composite board **14**, a matched bottom plastic composite board **16**, a matched back plastic composite board **18** and two matched lateral plastic composite boards **20**. The mutual connections of the five plastic composite boards **14**,**16**, **18** and **20** are knock-down hanging connections.

[0035] As FIG. **4**, the five plastic composite boards **14** and **16** and **18** and **20** all comprise a faceplate **22**, a soleplate **24**, a perforated plate **26** and a liner **28**. The perforated plate **26** is filled between the faceplate **22** and the soleplate **24**, the liner **28** is sandwiched between the faceplate **22** and the soleplate **24**, and the liner **28** entirely covers the perforated plate **26** along the periphery of the perforated plate **26**. Both the faceplate **22** and soleplate **24** are plastic combined boards of inhale molding, the thickness of the combined boards varies from 0.3 to 4 mm. The edge of the faceplate **22** extends downwards to form an upper wrapped edge **32**; the edge of the soleplate **24** extends downwards to form a nether wrapped edge **34**; the inner side of the upper wrapped edge **32** conglutinates with the outer side of the nether wrapped edge **34**; namely the superposition side **30** of the faceplate **22** and the soleplate **24** locates on the sides of the plastic composite boards **14** and **16** and **18** and **20**. The outer surfaces of faceplates **22** and soleplates **24** of the plastic composite boards **14** and **16** and **18** and **20** have printing layers of grain of wood or marbling.

[0036] As FIG. **5**, both sides of the apical plastic composite board **14** are inside embedded with first reinforcement pieces **36** as their liners; both first reinforcement pieces **36** have two first buckle holes **38** outside of the apical plastic composite board **14**. The first reinforcement pieces **36** are pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces.

[0037] As FIG. **6**, the four sides of the bottom plastic composite board **16** are all embedded with second reinforcement pieces **40** as their liners; both the left and the right second reinforcement pieces **40** have first fasteners **42** protruding out of the bottom plastic composite board **16**. The back second reinforcement **40** of the bottom plastic composite board **16** has two locating pins **58**. The second reinforcement pieces **40** are pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces. The first fasteners **42** are plastic hooks, L-shaped metal pieces, L-shaped sheet pieces or ladder-shaped pins. The first fasteners **42** fixedly connects with the second reinforcement pieces **40** by welding.

[0038] As FIG. **7**, the four sides of the back plastic composite board **18** are all embedded with third reinforcement pieces **44** as its liners; both third reinforcement pieces **44** have two second fasteners **62** protruding out of the back plastic composite board **18**. The underside of the back plastic composite board **18** has two location holes **60** to accept the two two locating pins **58**. The third reinforcement pieces **44** are pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces. The second fasteners **62** are plastic hooks, L-shaped metal pieces, L-shaped sheet pieces or ladder-shaped pins. The second fasteners **62** fixedly connects with the third reinforcement pieces **42** by welding.

[0039] As FIG. **8**, the four sides of the lateral plastic composite board **20** are separately inside embedded with a fourth reinforcement piece **46**, a fifth reinforcement piece **50** and a sixth reinforcement piece **54**, to form reinforcement frame liner. The reinforcement frame has three reinforcement poles **55** in landscape orientation. The fourth reinforcement piece **46** has two second buckle holes **48** outside of the lateral plastic composite board **20**; the fifth reinforcement piece **50** has third buckle hole **52** outside of the lateral plastic composite board **20**; the sixth reinforcement piece **54** has two third fasteners **56**. The fourth reinforcement piece **46** and the fifth reinforcement piece **50** and the sixth reinforcement piece **54** are all pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces. The third fasteners **56** are plastic hooks, L-shaped metal pieces, L-shaped sheet pieces or ladder-shaped pins. The third fasteners **56** fixedly connects with the sixth reinforcement pieces **54** by welding. Three runners **64** are fixedly installed on the reinforcement pole **55**.

[0040] Faceplates **22** and soleplates **24** of the plastic composite boards **14** and **16** and **18** and **20** also have paper

honeycomb cores or plastic honeycomb cores or epispastic stuffing except of reinforcement pieces and liners **28**.

[0041] Every buckle hole has suited structures with corresponding fastener.

[0042] As FIGS. **1** to **3**, the left and the right plastic composite boards **20** fixedly connect with the apical plastic composite board **14** by four third fasteners **56** hanging into the four first buckle holes **38**. The bottom plastic composite board **16** fixedly connects with the left and the right plastic composite boards **20** by two first fasteners **41** hanging into the two second buckle holes. The back plastic composite board **18** fixedly connects with the left and the right plastic composite boards **20** by four second fasteners **62** hanging into four second buckle holes **48**. The fixed connection of every plastic composite boards shows L-shape.

[0043] As FIG. **10**, the drawer **12** is made up of five plates: a bottom side plate **68**, left and right side plates **70**, a front side plate **72** and a back side plate **74**. The five side plates are connected with each other by hanging. The front side plate **72** is plastic composite board, which has same structure with above plastic composite board.

[0044] As FIG. **11**, both left side and right side of the bottom side plate have four fourth fasteners **76**, the back side of the bottom side plate **68** has three fifth fasteners **78**.

[0045] As FIG. **12**, the underside of the back side plate **74** has three fourth buckle holes **80**. The upper end of the back side plate **74** extents ahead to form a first orientation piece **82**. The middle part of the front end side of the back side plate **74** extends downwards to form a second orientation piece **84**. The left and the right end sides of the first orientation piece **82** extend downwards to form the third orientation pieces **86**.

[0046] As FIG. **13**, both the undersides of the left and the right side plates **70** have four fifth buckle holes **88**. Both the front sides of the left and the right side plates **70** extend outside to form joined piece **90**. Both upper sides of the left and the right side plates **70** extend outside to form L-shaped pieces **92**. Two L-shaped pieces **92** cooperate with the left and the right side plates **70** to form runner. Both back sides of the left and the right lateral plates **70** extend inside to form block piece **93**. Both the back side of the left and right lateral plates **70** extend ahead to form fourth orientation piece **94**.

[0047] As FIG. **10**, the bottom side plate **68** fixedly connects with the back side plate **74** by three fifth fasteners **78** buckling into three fourth buckle holes **80**. The left and the right side plates **70** fixedly connect with the bottom side plate **68** by fourth fastener **76** buckling into fifth buckle hole. The left and the right side plates **70** fixedly connect with the front side plate **72** by joined piece **90**.

[0048] The fourth orientation piece **94** fixedly joints with the third orientation piece **86**. The back side of the back side plate **74** joints with the front side of the block piece **93**.

[0049] As FIGS. **1** and **2** and **3** and **9**, the inner side of the left and the right plastic composite boards **20** have three runners **64**. The front side of the runners **64** have first idler wheels **66**; the back end of the runners **64** has a concave. Outside end of the left and the right side plates **70** have second idler wheels. Cooperation of the runners **64** and drawers **12** is known knowledge.

Embodiment 2

[0050] As FIGS. **14** to **17**, the difference of the present embodiment with the embodiment 1 is: drawer **5** is made up of five plastic composite plates. The drawer **5** comprises bottom drawer plate **121**, left drawer plate **122**, right drawer plate **123**, front drawer plate **124** and back drawer plate **125**.

[0051] The front drawer plate **124** comprises a faceplate, a soleplate, a perforated plate and a liner. The perforated plate is filled between the faceplate and the soleplate, the liner is sandwiched between the faceplate and the soleplate, and the liner entirely covers the perforated plate along the periphery of the perforated plate. Two front insert-meet pieces **126** fixedly connect with the liner of the front drawer plate **124**. Left and right end of the front drawer **124** extend backwards to form left and right wrapped edges **241**.

[0052] As FIG. **16**, the front insert-meet piece **126** comprises a body **261**; the left and the right oblong frame side of the body **261** extend ahead to form cooperation piece **262**; the left and the right sides of the cooperation piece **262** separately have five buckles **263**. The body **261** comprises three fastness hole **264** which cooperate with three fastness bolts. The front insert-meet piece **126** spirally connect with the liner of the front drawer **124**.

[0053] Both the bottom drawer plate **121** and the back drawer plate **125** comprise faceplate, soleplate, perforated plate and liner. The perforated plate is filled between the faceplate and the soleplate; the liner is sandwiched between the faceplate and the soleplate; the liner entirely covers the perforated plate along the periphery of the perforated plate. Two back insert-meet pieces **127** fixedly connect with the liner of the back drawer plate by bolts. In producing, firstly get faceplate and soleplate by suction molding, then get the present plastic composite board.

[0054] The back insert-meet piece **127** comprises a body; the left and right sides of back of the body extend backwards to form cooperation piece; the left and right sides of the cooperation piece have some buckles. The back insert-meet piece has the same structure with the front insert-meet piece.

[0055] Both the left drawer plate **122** and the right drawer plate **123** comprise a faceplate, a soleplate, a perforated plate and a liner. The perforated plate is filled between the faceplate and the soleplate; the liner is sandwiched between the faceplate and the soleplate; the liner entirely covers the perforated plate along the periphery of the perforated plate. The front sides of the liners of the left drawer plate **122** and the right drawer plate **123** have front insert-meeted pieces **128**; The back sides of the liners of the left drawer plate **122** and the right drawer plate **123** have back insert-meeted pieces **129**. The front insert-meeted pieces **128** and the back insert-meeted pieces **129** fixedly connect with the liners by bolts. Both the front insert-meeted pieces **128** and the back insert-meeted pieces **129** are sandwiched between the faceplates and the soleplates.

[0056] As FIG. **17**, the front insert-meeted piece **128** comprises a bottom piece **281** and a lateral piece **282**; the lateral piece **282** fixedly connect the edge of the bottom piece **281**. The joint of two lateral pieces **282** and the bottom piece **281** have five nicks **283**, which cooperate with buckles **263** of the front insert-meet piece **126**. The underside of the front insert-meeted piece **128** has fixed trough **284** for the bottom drawer plate **121**; the out side of the front insert-meeted piece **128** has path runner **285**. The back insert-meted piece **129** has the same structure with the front insert-meeted piece **128**. The underside of the outside of the left drawer plate **122** has left runner; the bottom of the left drawer plate **122** has left fixed trough **137**.

[0057] The right drawer plate **123** has the same structure with the left drawer plate **122**, accordingly it has right runner **135** and right fixed trough **138**. The left runner and the right runner is symmetrical.

[0058] The two sides of the bottom drawer plate **121** insert into the bottom fixed troughs **137** and **138** of the right drawer plate **123** and the left drawer plate **122**; the right drawer plate **123** and the left drawer plate **122** fixedly connects with the front drawer plate **128** by front insert-meeted piece **128**; the

right drawer plate **123** and the left drawer plate **122** fixedly connects with the back drawer plate **125** by back insert-meeted piece **129**;

INDUSTRY PRACTICABILITY

[0059] Every parts of the present invention are knock-down hanging connection, and are all or partly plastic composite boards, are easy machining, simple assembly, has good industry practicability.

1. A combined and upright file cabinet, comprising: a file cabinet body including an apical plate and a lateral plate and a backboard, a plurality of drawers which moveably link with the file cabinet body, said file cabinet body and drawers are partly or all plastic composite boards, the connections of each said parts of the file cabinet are knock-down; said plastic composite board has a faceplate, a soleplate, a perforated plate and a liner; the perforated plate is filled between the faceplate and the soleplate, the liner is sandwiched between the faceplate and the soleplate, and the liner entirely or interval partly covers the perforated plate along the periphery of the perforated plate.

2. The combined and upright file cabinet according to claim **1**, wherein the mutual connections of the plastic composite boards of the file cabinet body are a knock-down hanging connection; said every two plastic composite boards are a hanging connection: a first plastic composite board at least having a pair of sides inside embedded with liner as reinforcement pieces, a second plastic composite board at least having a pair of sides inside embedded with the liner as reinforcement pieces, and the side reinforcement piece of the connection of the first plastic composite board and the second plastic composite board has a buckle hole outside of the first plastic composite board, accordingly the reinforcement piece of the second plastic composite board has a fastener protruding outside of the second plastic composite board; the first plastic composite board fixedly connects with the second plastic composite board by buckling the fastener into the buckle hole.

3. The combined and upright file cabinet according to claim **2**, wherein said four sides of the lateral plate of the file cabinet body are all embedded with liners as reinforcement pieces to form reinforcement frame, which has several reinforcement poles in landscape orientation; runners are installed on the transverse reinforcement poles.

4. The combined and upright file cabinet according to claim **1**, wherein both the faceplate and the soleplate of said plastic composite board are plastic combined boards of vacuum molding, the superposition sides of the faceplate and the soleplate are located on the side of the plastic composite board, the superposition side of the faceplate and the soleplate connect with each other by jointing or gluewater; the plastic composite board is filled with paper honeycomb core or plastic honeycomb core or epispastic stuffing; or both the faceplate and the soleplate of the plastic composite board are plastic pieces, the circumferences of the faceplate and the soleplate are enwraped by enveloping regulas, the plastic composite board is filled with paper honeycomb core or plastic honeycomb core or epispastic stuffing; or both the faceplate and the soleplate of the plastic composite board are single layer or multi-layer plastic boards made by vacuum molding, the thickness of the plastic board is in the range of 0.3 to 4 mm.

5. The combined and upright file cabinet according to claim **4**, wherein the surfaces of the faceplate and the soleplate of said plastic composite board are printed with a printing layer of grain of wood or marbling or complexed with a film layer of grain of wood or marbling.

6. The combined and upright file cabinet according to claim **2**, wherein the reinforcement pieces embedded into the plastic composite board are pipe fittings, extrusion shaped materials, injection molding pieces or hardware complex pieces.

7. The combined and upright file cabinet according to claim **2**, wherein the fasteners of the second plastic composite board fixedly connects with the reinforcement piece embedded into the second plastic composite board by jointing or a rivet or a screw thread.

8. The combined and upright file cabinet according to claim **2**, wherein said fasteners are plastic hooks, L-shaped metal pieces, L-shaped sheet pieces or ladder-shaped pins; said buckle holes are rectangle holes or oblong holes or ladder holes; the fasteners correspond with the buckle holes.

9. The combined and upright file cabinet according to claim **8**, wherein the fixed connection of the first plastic composite board and the second plastic composite board is "L" shaped, "T" shaped or "-" shaped.

10. The combined and upright file cabinet according to claim **1**, wherein said drawer is made up of five plates: a bottom side plate, a left side plate, a right side plate, a front side plate and a back side plate; said every two side plates are of a hanging connection: the first side plate has a fastener and the second side plate has a buckle hole to accept the fastener; the drawer is made up of the bottom side plate, the left side plate, the right side plate, the front side plate and the back side plate by the fasteners hanging into the buckle holes.

11. The combined and upright file cabinet according to claim **10**, wherein said front side plate is plastic composite board.

12. The combined and upright file cabinet according to claim **1**, wherein said drawer is made up of five plates: a bottom drawer plate, a left drawer plate, a right drawer plate, a front drawer plate, a back drawer plate; two front insert-meet pieces are installed at two sides of the inner side of the front drawer plate, two back insert-meet pieces are installed at two sides of the inner side of the back drawer plate; correspondingly insert-meeted pieces are installed at an end side of each of the left and the right drawer plates; the left drawer plate and the right drawer plate fixedly connect with the front drawer plate and the back drawer plate by insert-meet pieces inserting into insert-meeted pieces; the downside of the inner side of the left drawer plate and the right drawer plate has fixed troughs, the outside has runners; the bottom drawer plate fixedly connects with the left drawer plate and the right drawer plate by being inserted into the fixed troughs.

13. The combined and upright file cabinet according to claim **12**, wherein said drawer plates are all plastic composite plates.

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