Court File No.

FEDERAL COURT

B E T W E E N :

FITTES CANADA INC. and 2721111 ONTARIO INC.

Plaintiffs

- and -

ZION BUILDING SUPPLIES LTD.

Defendant

STATEMENT OF CLAIM

TO THE DEFENDANT:

A LEGAL PROCEEDING HAS BEEN COMMENCED AGAINST YOU by the plaintiff. The claim made against you is set out in the following pages.

IF YOU WISH TO DEFEND THIS PROCEEDING, you or a solicitor acting for you are required to prepare a statement of defence in Form 171B prescribed by the *Federal Courts Rules*, serve it on the plaintiff's solicitor or, if the plaintiff does not have a solicitor, serve it on the plaintiff, and file it, with proof of service, at a local office of this Court

WITHIN 30 DAYS after the day on which this statement of claim is served on you, if you are served in Canada or the United States; or

WITHIN 60 DAYS after the day on which this statement of claim is served on you, if you are served outside Canada and the United States.

TEN ADDITIONAL DAYS are provided for the filing and service of the statement of defence if you or a solicitor acting for you serves and files a notice of intention to respond in Form 204.1 prescribed by the *Federal Courts Rules*.

Copies of the *Federal Courts Rules*, information concerning the local offices of the Court and other necessary information may be obtained on request to the Administrator of this Court at Ottawa (telephone 613-992-4238) or at any local office.

IF YOU FAIL TO DEFEND THIS PROCEEDING, judgment may be given against you in your absence and without further notice to you.

October ___, 2024

Issued by:
Address of local office: 180 Queen Street West, Suite 200
Toronto ON M5V 3L6

TO: ZION BUILDING SUPPLIES LTD.
2220 Midland Avenue, 18br,
Toronto, ON M1P 3E6
CANADA

CLAIM

1. The Plaintiffs claim against Zion Building Supplies Ltd. (the "**Defendant**") as follows:

(a) A declaration that the Defendant has directly and by inducement and procurement infringed claims 1-11 of Canadian Patent No. 3,008,655 ("**655 Patent**").

(b) A permanent injunction to restrain the Defendant, by themself or through their shareholders, directors, officers, agents, servants, employees, affiliates, parent company, subsidiaries, or any other entity under their authority or control, from directly or indirectly:

(i) Manufacturing, distributing, offering for sale, selling, supplying or otherwise making available, or using in Canada, or manufacturing abroad for sale in Canada, any assembly that infringes claims 1-11 of the 655 Patent;

(ii) Inducing and procuring others to manufacture, distribute, offer for sale, sell, supply, make available or use in Canada, or manufacture abroad for sale in Canada, any assembly that infringes claims 1-11 of the 655 Patent;

(c) An order for delivery up to the Plaintiffs, or destruction, of all assemblies in the possession, custody, or control of the Defendant, or for which the Defendant has title, as well as any and all packaging, marketing, and promotional material associated therewith, which may offend the injunction sought above and payment of all costs incurred by the Plaintiffs associated with such delivery up or destruction;

(d) Reasonable compensation for all damages sustained by the Plaintiffs after the application for the 655 Patent became open to public inspection and before the grant of the patent;

(e) Damages for the harm suffered by the Plaintiffs in an amount in excess of $50,000, as specified in Rule 182(b) of the *Federal Courts Rules*, exclusive of costs and interest, or an accounting of profits of the Defendant, whichever the Plaintiffs may elect, after due inquiry and full discovery;

(f) Exemplary, aggravated, and punitive damages;

(g) Pre-judgment interest and post-judgment interest on all monetary relief at the highest possible scale;

(h) Costs incidental to this action on the highest possible scale, or such other basis as this Honourable Court may Order, plus all applicable taxes, and including all disbursements; and

(i) Such further and other relief as counsel may advise and this Honourable Court deems just.

THE PLAINTIFFS AND THEIR RIGHTS

2. Fittes Canada Inc. is a corporation organized and existing under the laws of the province of Ontario, with a place of business at 296 Carlingview Drive, Etobicoke, Ontario, Canada M9W 5G1 ("**Fittes Canada**").

3. 2721111 Ontario Inc. is a corporation organized and existing under the laws of the province of Ontario, with a place of business at 296 Carlingview Drive, Etobicoke, Ontario, Canada M9W 5G1 ("**Fittes Holding**"). Fittes Canada and Fittes Holding are related companies with the same principals—the father and daughter team of Paolo and Roberta Mantenuto. Fittes Canada and Fittes Holding are collectively referred to herein simply as "**Fittes**".

4. Fittes has become a market leader in construction design, with a vision to create novel, thoughtful, and innovative products. A key innovation developed by Fittes and now owned by Fittes Holding is a modular air register assembly for inserting into various surfaces, including floors, ceilings, and walls.

5. Fittes Holding is the listed owner of the 655 Patent, titled “Register Assembly”. The 655 Patent issued on January 28, 2020. The application giving rise to the 655 Patent, CA2016/050687, was filed pursuant to the Patent Cooperation Treaty on June 15, 2016. The application was published on December 21, 2017 under PCT Publication No. 2017/214697 and entered national phase in Canada on June 15, 2018. A copy of the 655 Patent is attached hereto as **Appendix “A”.**

6. The 655 Patent is directed to novel and modular air vent register assemblies for inserting into one of floors, ceilings, and walls. Paolo Mantenuto is the sole inventor listed on the 655 Patent.

7. Fittes Holding has, and at all times has had, the exclusive right, privilege and liberty to make, construct, use, sell to others to be used, and license all rights to the invention described and claimed in the 655 Patent in Canada. Fittes Holding’s exclusive rights have existed since at least as early as the date of issuance of the 655 Patent and will continue to exist until its expiry on June 15, 2036. A right to reasonable compensation also arose on the date of publication of the 655 Patent.

8. Fittes Canada is the exclusive licensee of the 655 Patent and sells air vent register assemblies in Canada as disclosed and claimed in the 655 Patent.

THE DEFENDANT AND THEIR WRONGFUL CONDUCT

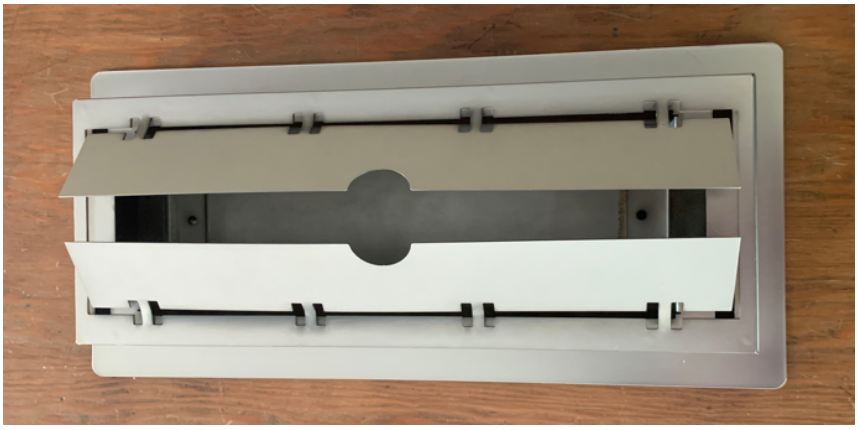
9. The Defendant, Zion Building Supplies Ltd., is a corporation organized and existing under the laws of the province of Ontario with a registered business address at 2220 Midland, 18br, Toronto, ON M1P 3E6.

10. The Defendant is a wholesaler and retailer of home improvement materials and building supplies. It has two retail locations, 2989 Kennedy Rd, Toronto, ON M1V 1S9 and 59 Bramalea Rd, Brampton, ON L6T 2W4.

11. Since a date unknown to Fittes but known to the Defendant, the Defendant has been manufacturing, in Canada and/or abroad for sale in Canada, selling, offering for sale, and distributing air vent register assemblies in Canada for use with floors, ceilings,

and walls. The air vent register assemblies manufactured in Canada and/or manufactured abroad for sale in Canada, sold, offered for sale, and distributed by the Defendant infringes claim 1-11 of the 655 Patent.

12. The following are representative photographs of the air vent register assemblies distributed by the Defendant, referred to herein for convenience as the “Zion Air Vents”:



13. The manufacture in Canada, manufacture abroad for sale in Canada, and sale, offering for sale, and distribution of the Zion Air Vents in Canada has and continues to deprive the patentee, in whole or in part, directly or indirectly, of the full enjoyment of the monopoly conferred by 655 Patent, as further described below.

14. By virtue of the activities of the Defendant, including its sale and distribution of such Zion Air Vents in Canada, it has wrongfully made use of the invention described and claimed in the 655 Patent in Canada.

15. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are aptly described as:

(a) a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

(b) a support disposed within the first open top box;

(c) a second open top box for nesting within the first open top box, and supported by the support;

(d) the support comprising a plurality of L-shaped supports having a first portion extending orthogonally from the bottom surface of the first open

top box, and a second portion extending orthogonally from said first portion;

(e) the second portion defining a receptacle to matingly receive a projection extending from the second open top box, thereby restraining the second open top box within the first open top box; and

(f) wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment,

all as defined by claim 1 of the 655 Patent.

16. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are aptly described as:

(a) a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

(b) a support disposed within the first open top box;

(c) a second open top box for nesting within the first open top box, and supported by the support;

(d) the support having a first portion extending orthogonally from the bottom surface of the first open top box and a second portion extending orthogonally from said first portion;

(e) the second portion defining a receptacle to matingly receive a projection extending from the second open top box, thereby restraining the second open top box within the first open top box; and

(f) wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment,

all as defined by claim 2 of the 655 Patent.

17. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are aptly described as:

(a) a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

(b) a support disposed within the first open top box;

(c) a second support having a first portion extending orthogonally from the bottom surface of the first open top box and a second portion extending orthogonally from said first portion;

(d) the second portion having a projection extending from the second portion to be matingly received by a receptacle of the second open top box, thereby restraining the second open top box within the first open top box; and

(e) wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment,

all as defined by claim 3 of the 655 Patent.

18. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are such that the first and second open top boxes are sized and dimensioned to be coplanar with each other when nested, all as defined by claim 4 of the 655 Patent.

19. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are such that the projection and the receptacle form a male-female locking mechanism, all as defined by claim 5 of the 655 Patent.

20. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents comprise the following element, all as defined by claim 6 of the 655 Patent: a faceplate inserted into the second open top box, wherein the faceplate is coplanar with the second open top box.

21. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents comprise a faceplate that is manufactured to match any of the surrounding floor, ceiling, and wall, all as defined by claim 7 of the 655 Patent.

22. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents comprise a faceplate that is coplanar with any of the surrounding floor, ceiling, and wall, all as defined by claim 8 of the 655 Patent.

23. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents comprise a closeable flap that is attached to the bottom surface of the first open top box for damping air flow, all as defined by claim 9 of the 655 Patent.

24. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents comprise a faceplate that is any of one of hardwood flooring, sponge, dry wall, stone, marble, veneer, laminate, painted wall and wallpapered dry wall, all as defined by claim 10 of the 655 Patent.

25. When manufactured in Canada, manufactured abroad for sale in Canada, and sold, offered for sale and distributed in Canada, the Zion Air Vents are such that the

first and second open top boxes are manufactured from any of metal and plastic, all as defined by claim 11 of the 655 Patent.

26. The Zion Air Vents sold, offered for sale, and distributed by the Defendant did not originate from Fittes nor are they or were they ever authorized by Fittes.

RELIEF SOUGHT

27. The Defendant has at all material times known about Fittes' rights under the *Patent Act*, and specifically, under section 42 and 55 of the *Patent Act*. Despite that knowledge, the Defendant has infringed and continues to infringe the 655 Patent, both directly and by inducing and procuring others to infringe.

28. The Defendant has at no time obtained a licence to the 655 Patent from Fittes that would cover these infringing activities, nor has the Defendant otherwise attempted to compensate Fittes for their infringement, directly and/or by inducement and procurement, of the 655 Patent.

29. The precise number and dates of acts of infringement, and/or inducement or procurement of infringement by others, of the claims of the 655 Patent by the Defendant are not specifically known to Fittes but are know to the Defendant. Fittes claims relief in respect of all acts of infringement.

30. By reason of the Defendant's activities, Fittes has suffered and will continue to suffer harm and damage, and the Defendant will have made and will continue to make a profit unless restrained by this Honourable Court.

31. The Defendant has, by the acts described above, made an unlawful profit and Fittes has suffered substantial and irreparable loss and damage. Fittes is therefore entitled to a permanent injunction as well as damages or an accounting of profits, at its election.

32. The Defendant has acted in a deliberate and high-handed manner with respect to the rights of Fittes and is thus liable for punitive, aggravated, and exemplary damages.

33. Fittes proposes that this action be tried in Toronto, Ontario.

October 30, 2024

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Solicitors for the Plaintiffs

APPENDIX "A"

Innovation, Sciences et Développement économique Canada
Office de la Propriété Intellectuelle du Canada

Innovation, Science and Economic Development Canada
Canadian Intellectual Property Office

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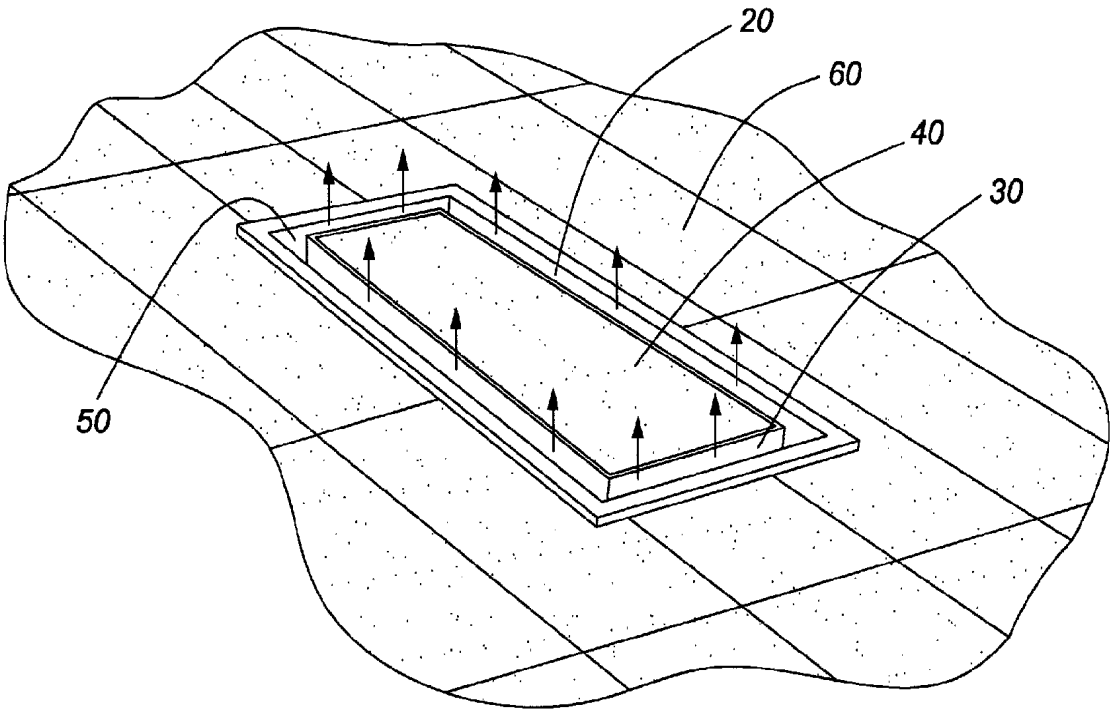
(72) Inventeur/Inventor:
MANTENUTO, PAOLO, CA

(73) Propriétaire/Owner:
2721111 ONTARIO INC., CA

(74) Agent: DLA PIPER (CANADA) LLP

(54) Titre : ENSEMBLE REGISTRE
(54) Title: REGISTER ASSEMBLY



(57) Abrégé/Abstract:
In one embodiment, the invention is a register assembly for inserting into floors, ceilings and walls, comprising a first open top box having a bottom surface, which defines a centrally disposed opening through which air flows from a first environment to a second environment. A support is disposed within the first open top box. A second open top box nests within the first open top box, and is supported by the support. A restraint is associated with the first and second box to restrain the second box within the first box. The first and second open top boxes are sized and dimensioned to be coplanar with each other when nested. A conduit is also defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(72) Inventor: **MANTENUTO, Paolo**; Unit B, 8800 Jane Street, Concord, Ontario L4K 2M9 (CA).

(74) Agent: **PNC IP GROUP PROFESSIONAL CORPORATION**; 10388 Keele Street, Vaughan, Ontario L6A 4M9 (CA).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,

(54) Title: REGISTER ASSEMBLY

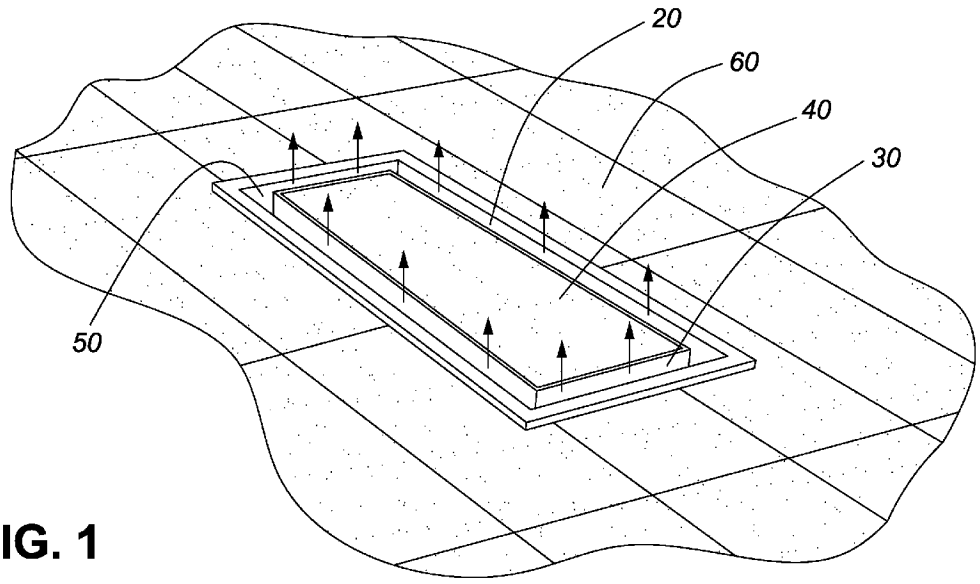

FIG. 1

(57) Abstract: In one embodiment, the invention is a register assembly for inserting into floors, ceilings and walls, comprising a first open top box having a bottom surface, which defines a centrally disposed opening through which air flows from a first environment to a second environment. A support is disposed within the first open top box. A second open top box nests within the first open top box, and is supported by the support. A restraint is associated with the first and second box to restrain the second box within the first box. The first and second open top boxes are sized and dimensioned to be coplanar with each other when nested. A conduit is also defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

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[Continued on next page]

TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

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TITLE

REGISTER ASSEMBLY

BACKGROUND

[0001] There are many different types of registers for air ducts. One common type is simply a faceplate that covers an air duct opening. The faceplate consists of a grid, series of louvers or ornamental designs. Many examples of faceplates include a mechanism to move the louvers to control the direction of air flow. Dampers, filters and humidifiers are also often integrated into registers for air ducts.

[0002] Registers are typically manufactured from a metal such as steel or aluminum, and plastic, and are usually rectangular or circular. Most registers for air ducts within floors are manufactured from steel or plastic, while aluminum is preferred for registers in walls and ceilings. Faceplates are usually manufactured to be slightly larger than the duct opening so that edge portions of the faceplate overlap the surrounding wall, ceiling or floor, which means the faceplate extends slightly away from the floor, ceiling or wall. The grid or louvered design is often unsightly and can mar the appearance of home surfaces. It is also unpleasant to tread upon registers installed in a floor.

[0003] Although it is known to manufacture faceplates with ornamental designs that blend in with surrounding walls, floors and ceilings, special tools and expertise are generally required. Such custom-made registers are also expensive.

[0004] What is required is a cost-effective air vent register that can be customized easily to match the surrounding floor, ceiling and walls.

SUMMARY

[0005] In one embodiment, the invention is a register assembly for inserting into floors, ceilings and walls, comprising a first open top box having a bottom surface, which defines a centrally disposed opening through which air flows from a first environment to a second environment. A support is disposed within the first open top box. A second open top box nests within the first open top box, and is supported by the support. A restraint is associated with the first and second box to restrain the second box within the first box. The first and second open top boxes are sized and dimensioned to be coplanar with each other when nested. A conduit is also defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

DRAWINGS

[0006] FIG. 1 is an illustration of a register assembly according to the present invention installed within a floor.

[0007] FIG. 2 is a perspective view of two components of the register assembly.

[0008] FIG. 3 is a top plan view of the register assembly.

[0009] FIG. 3A is a top plan view of an insert for the register assembly showing cut and fold lines.

[0010] FIG. 4 is a perspective view of the three individual components of the register assembly shown in FIG. 1.

[0011] FIG. 4A is a top plan view of a register body of the register assembly showing cut and fold lines.

[0012] FIG. 4B is a cross-section through line 4B-4B.

[0013] FIG. 4C is a cross-section through line 4C-4C.

[0014] FIG. 5 is a cut away view of the the register body and insert illustrating a means by which the register body and insert re secured to one another.

DESCRIPTION

[0015] The present invention is a register assembly for an air duct. The register assembly can be installed in a wall, ceiling or floor. In the example shown in FIG . 1, the register is installed in the floor (60) so that all components of the assembly are coplanar with each other, and with the surrounding floor.

[0016] In its most basic form, the assembly is comprised of two components, namely a register body (20) and an insert (30) (see FIG. 2). As best viewed in FIG. 4, the register body (20) resembles an open top box comprising a bottom surface (150) and two pairs of opposing sidewalls (180, 190) enclosing an interior, into which the insert (30) is inserted (see also FIG. 2). The bottom surface (150) defines a centrally disposed opening (FIG. 5, 70) for air to flow from a first environment to a second environment.

[0017] The insert (30) (see FIG. 4) also resembles an open top box comprising a bottom surface (140) and two pairs of opposing sidewalls (160, 170) enclosing an interior. The insert (30) is sized and dimensioned to be nested and restrained within the register body (20) so that the body (20) and insert (30) are coplanar with one another, and with the surrounding floor, ceiling or wall. There is also at least one support (100) disposed within the register body thereby ensuring there is a conduit (FIG. 1, 50) formed between the insert (30) and the body (20) when the insert (30) is inserted and restrained within the body (20). The arrows in FIG. 1 represent the movement of air out of the register assembly (10) from a first environment to a second environment.

[0018] The conduit (50) is in communication with the body bottom surface opening (70) and permits air to flow from the first environment to the second environment. Said first and second environments contemplates a variety of situations, including, ventilating a room inside a building with air from outside the building,

providing air flow between two rooms in a building, and providing heated or cooled air from an air duct to a room.

[0019] In a preferred embodiment, the register body (20) and insert (30) are manufactured from a suitable metal or plastic. To create the bottom opening (70) in a metal register assembly according to the present invention, the body bottom surface (150) is cut or stamped out along lines (C3) and (C4) as shown in FIG. 4A. An advantage of this method is that the support (100) for the insert (30) is integrated with the the register body (20) as will be described. The now moveable portions of the bottom surface (150) are folded upwardly along lines C-D until perpendicular to the bottom surface (150). A second fold downward towards the bottom surface (150) is made along lines E-F. The two folds result in an L-shaped support (100), extending upwardly from the bottom surface (150) of the register body (20), as shown at the right-hand side of FIG. 4A and in FIG. 4C. The left-hand portion of FIG. 4A and corresponding FIG. 4B show the register body (20) prior to the first and second folds at lines C-D and E-F.

[0020] A restraint is used to restrain the insert (30) within the body (20). In a preferred embodiment, said restraint is a cooperative engagement between the insert (30) and the body (20). An example of a cooperative engagement, in the form of a male-female locking mechanism, is shown in FIG. 5. An opening having a narrow portion (120) and a wide portion (110) can be created in each of the L-shaped supports (100) (FIGS. 4A and 5). The openings (110, 120) form the female portion of a male-female locking mechanism to restrain the insert (30) within the body (20).

[0021] To create the male portion, the bottom surface (140) of the insert (30) can be modified to have two openings (130) from which T-shaped projections (90) extend (FIGS. 3 and 4). To create the openings, the insert bottom surface (140) is cut or stamped out along line C1 and folded downwardly along lines A-B away from the bottom

surface of the insert (140). This results in a T-shaped projection (90) that extends orthogonally from the bottom surface of the insert (30; see FIG. 4 and FIG. 5). Optionally, bottom surface (140) can be cut or stamped out along line C2 (FIG. 3A) to create the rectangular opening (130) as illustrated in FIG. 4 and FIG. 5.

[0022] As illustrated in FIG. 5, the T-shaped projection (90) of the insert (30) is inserted into the opening wide portion (110) of the register body L-shaped support (100). Once inserted, the T-shaped projection (90) can be slideably inserted into the opening narrow portion (120), thereby restraining and locking the insert (30) onto the register body support (100).

[0023] The T-shaped projection (90) / L-shaped support (100) combination is not the only means of securing the insert (30) to the body (20). Many other types of male-female connectors, adhesives and connectors can be used to accomplish the same function.

[0024] To complete the register assembly, a faceplate (40) can be installed within the insert (30). The faceplate (40) (FIG. 1 and FIG. 4) is removable and customizable so that any type of faceplate can be inserted within the insert (30). The faceplate (40) is easily manufactured to match the surrounding wall, ceiling or floor. The surrounding floor, ceiling or wall can be any one of marble, carpet, granite, wall painted a particular colour, wall covered in wall paper, and any other suitable material. All that is required is a matching faceplate (40) cut to the appropriate size to fit within the insert (30). A homeowner can purchase a register body (20) and insert (30) and can easily manufacture a matching faceplate (40) using materials and tools at home.

[0025] In other embodiments, movement of air through the register can be controlled by attaching a damper (FIG. 2; 140) onto the the bottom surface (150) of the register body (20). In another embodiment, the faceplate (40) can be replaced with a

humidifying unit.

[0026] In yet another embodiment, the register body (20) can be manufactured to be installed in an "undermounted" fashion to make the register assembly even less visible.

What is claimed is:

1. An air vent register assembly for inserting into one of floors, ceilings and walls, comprising:

a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

a support disposed within the first open top box;

a second open top box for nesting within the first open top box, and supported by the support;

the support comprising a plurality of L-shaped supports having a first portion extending orthogonally from the bottom surface of the first open top box, and a second portion extending orthogonally from said first portion;

the second portion defining a receptacle to matingly receive a projection extending from the second open top box, thereby restraining the second open top box within the first open top box; and

wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

2. An air vent register assembly for inserting into one of floors, ceilings and walls, comprising:

a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

a support disposed within the first open top box;

a second open top box for nesting within the first open top box, and supported by the support;

the support having a first portion extending orthogonally from the bottom surface of the first open top box and a second portion extending orthogonally from said first portion;

the second portion defining a receptacle to matingly receive a projection extending from the second open top box, thereby restraining the second open top box within the first open top box; and

wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

3. An air vent register assembly for inserting into one of floors, ceilings and walls, comprising:

a first open top box having a bottom surface defining a centrally disposed opening through which air flows from a first environment to a second environment;

a support disposed within the first open top box;

a second open top box for nesting within the first open top box, and supported by the support;

the support having a first portion extending orthogonally from the bottom surface of the first open top box and a second portion extending orthogonally from said first portion;

the second portion having a projection extending from the second portion to be matingly received by a receptacle of the second open top box, thereby restraining the second open top box within the first open top box; and

wherein a conduit is defined between the first open top box bottom surface opening and the second open top box to flow air from the first environment to the second environment.

4. The assembly of any one of claims 1 to 3, wherein the first and second open top boxes being sized and dimensioned to be coplanar with each other when nested.

5. The assembly of any one of claims 1 to 4, wherein the projection and the receptacle form a male-female locking mechanism.

6. The assembly of any one of claims 1 to 5, further comprising a faceplate inserted into the second open top box, wherein the faceplate is coplanar with the second box.

7. The assembly of claim 6, wherein the faceplate is manufactured to match any of the surrounding floor, ceiling and wall.

8. The assembly of claim 7, wherein the faceplate is coplanar with any of the surrounding floor, ceiling and wall.

9. The assembly of any one of claims 1 to 8, wherein a closeable flap is attached to the bottom surface of the first open top box for damping air flow.

10. The assembly of any one of claims 6 to 8, wherein the faceplate is any one of hardwood flooring, sponge, dry wall, stone, marble, veneer, laminate, painted wall and wallpapered dry wall.

11. The assembly of any one of claims 1 to 10, wherein the first and second open top boxes are manufactured from any of metal and plastic.

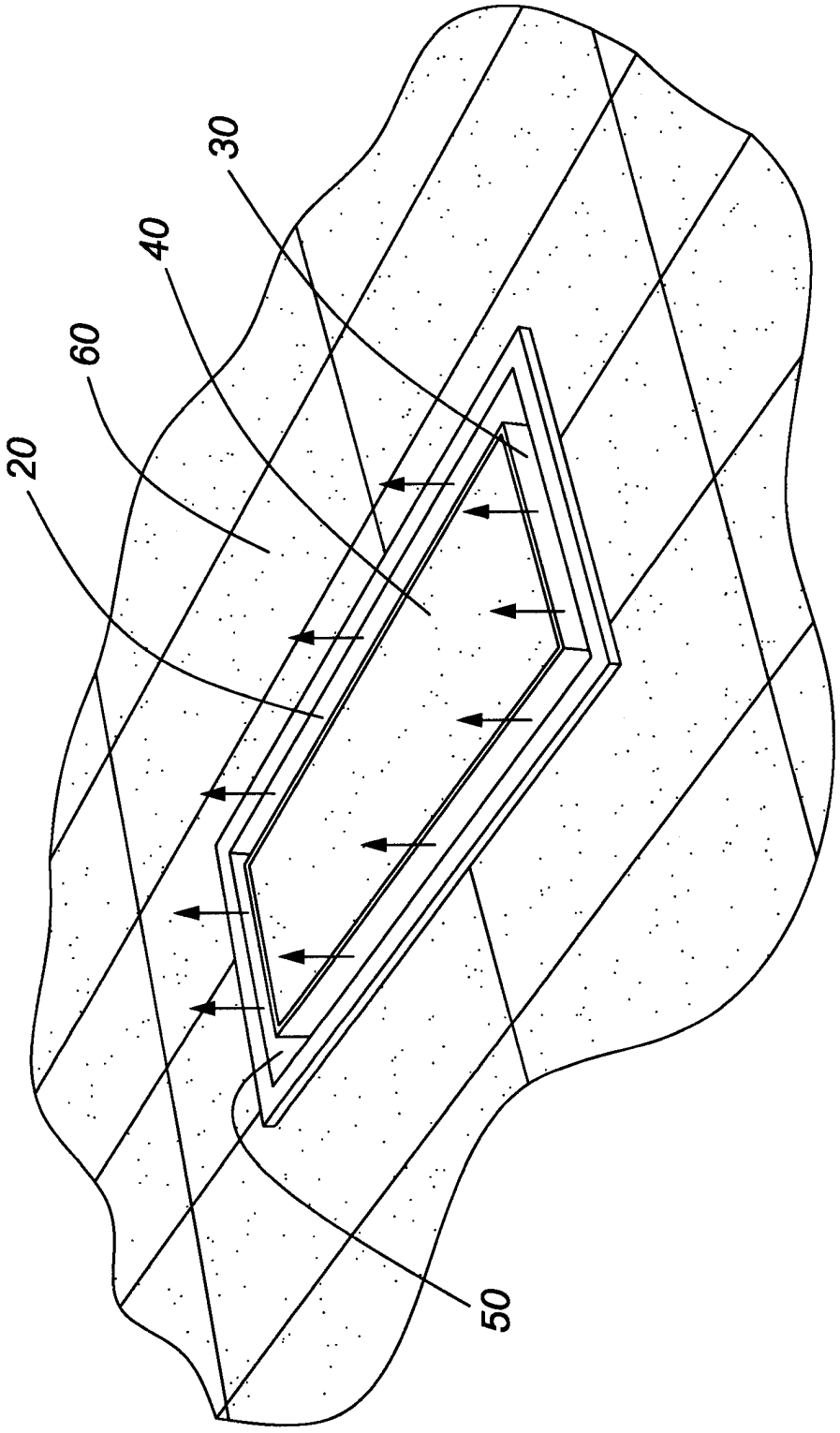

FIG. 1

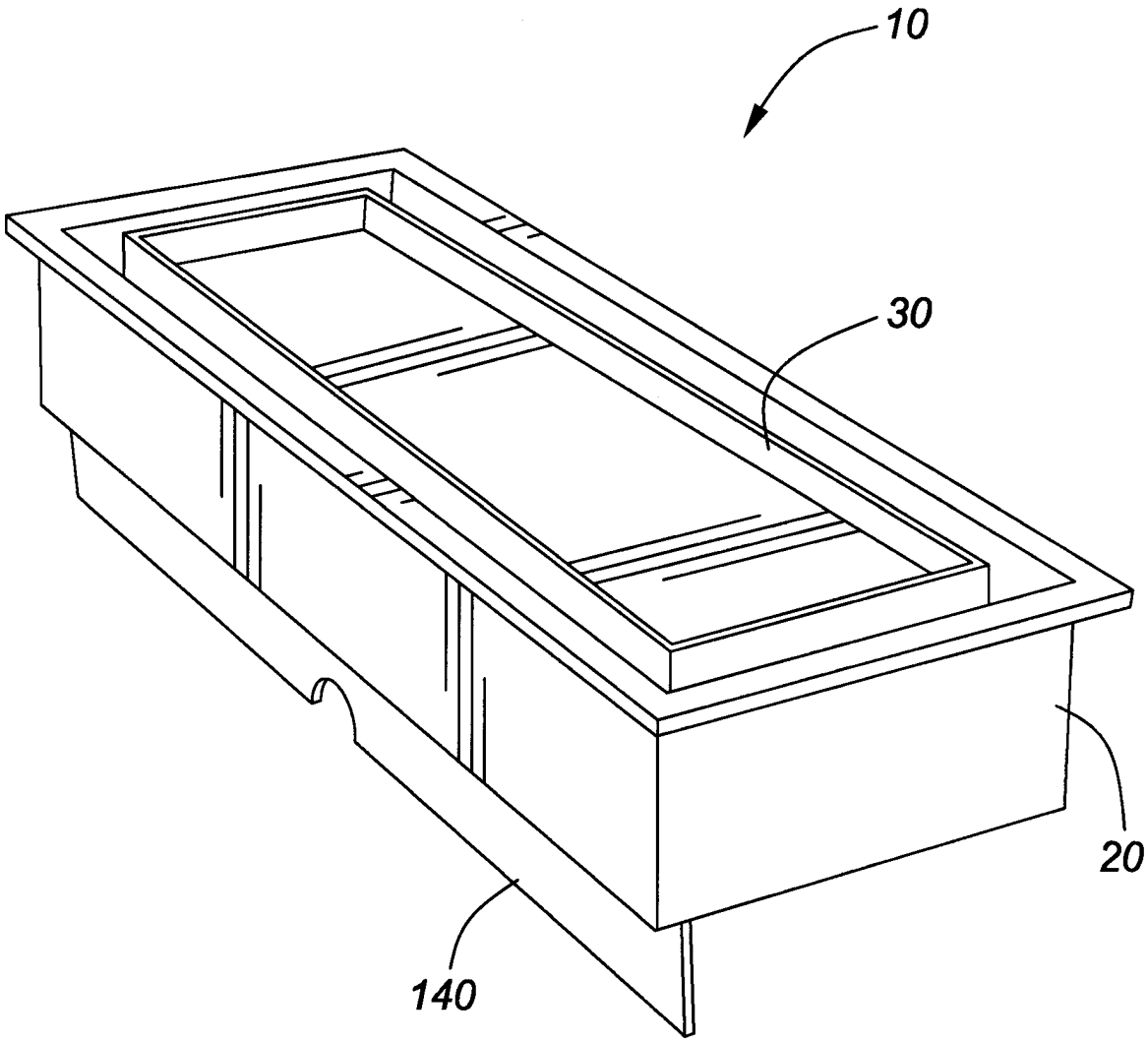

FIG. 2

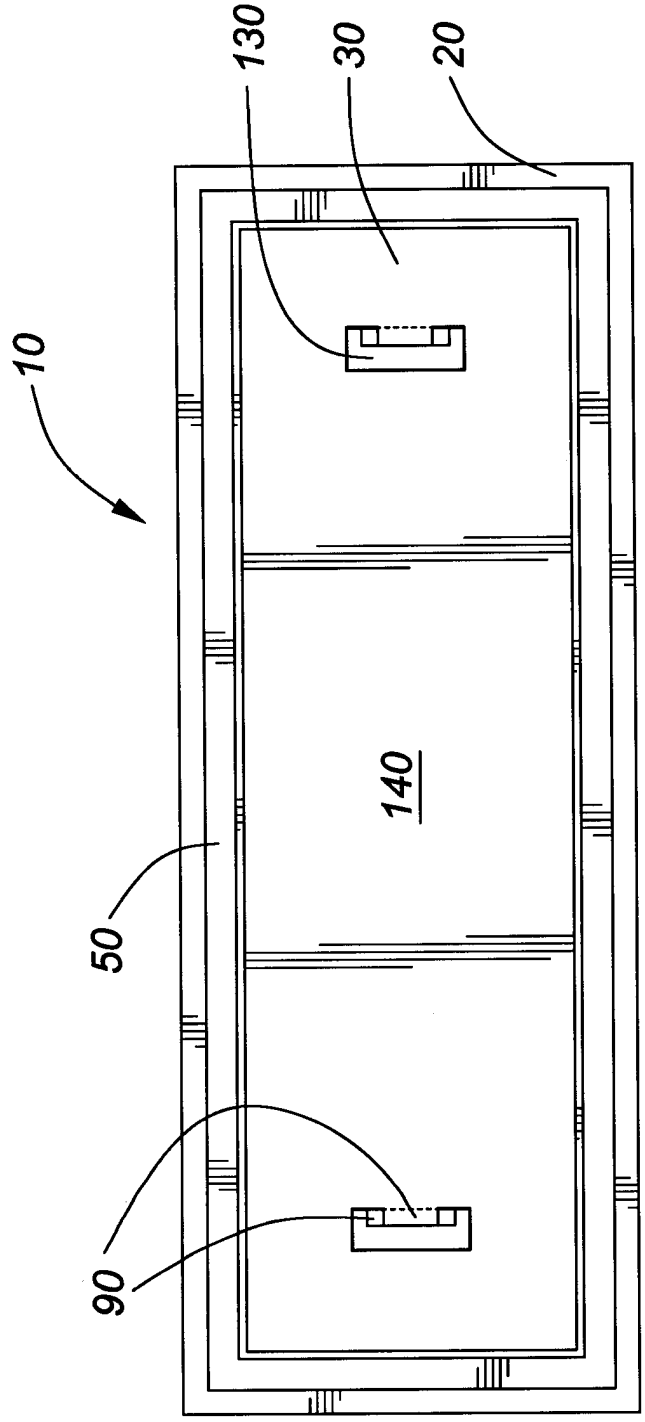

FIG. 3

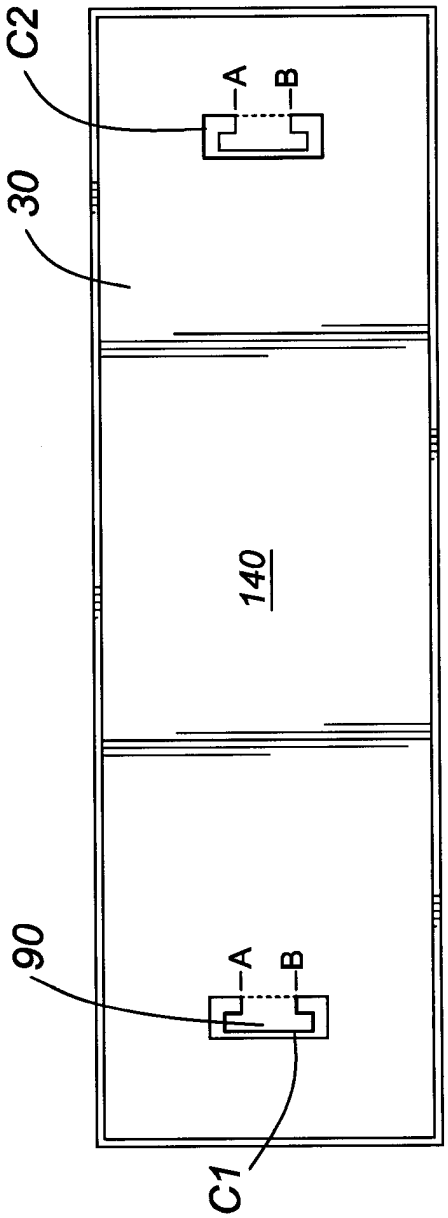

FIG. 3A

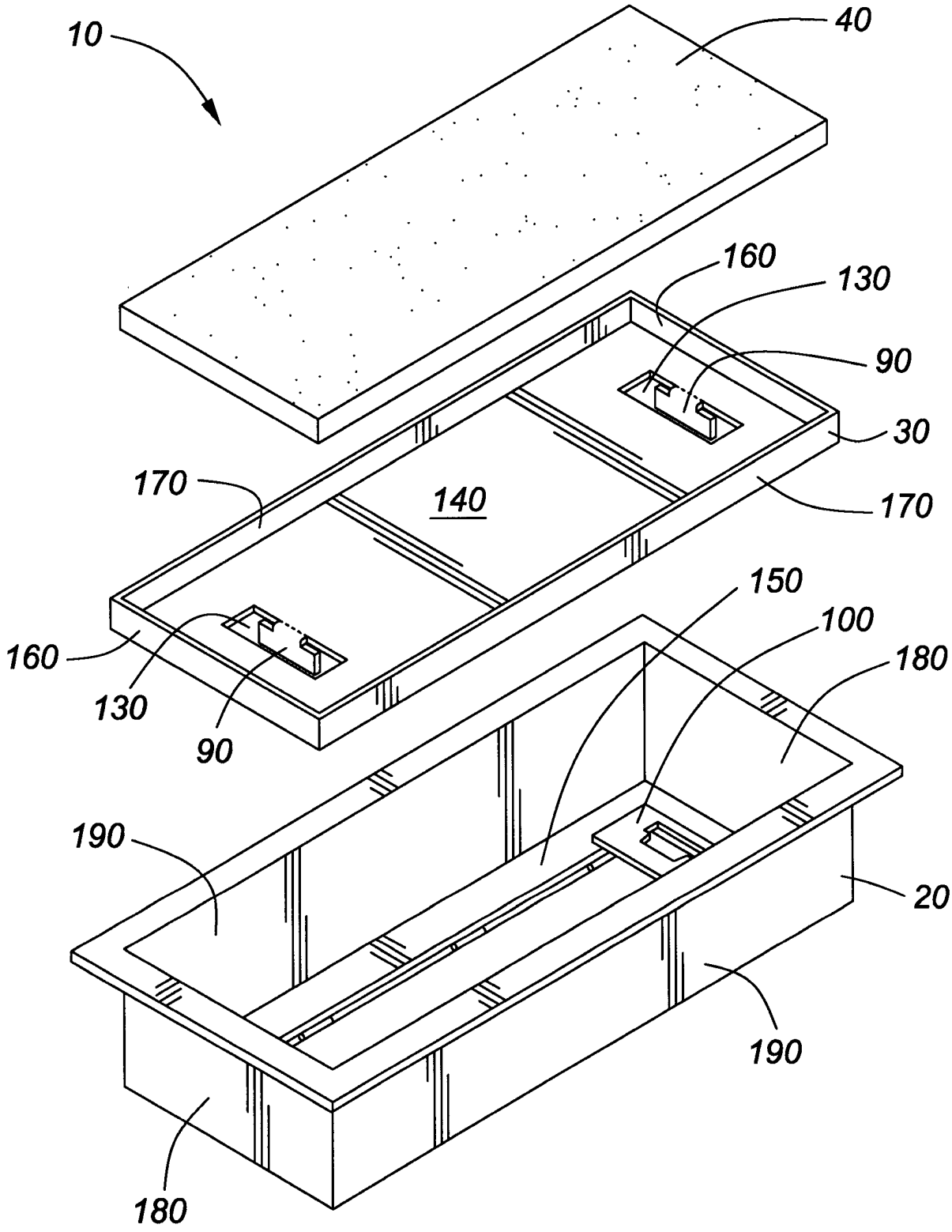
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FIG. 4

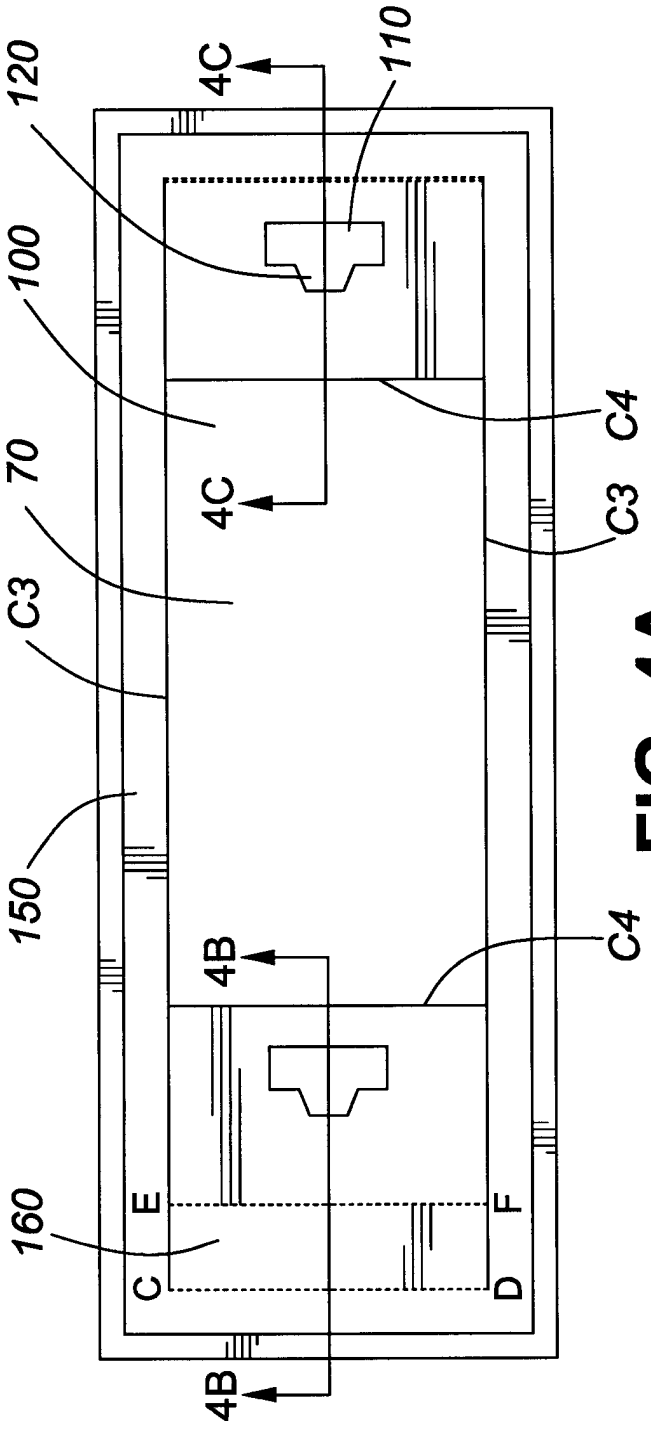

FIG. 4A

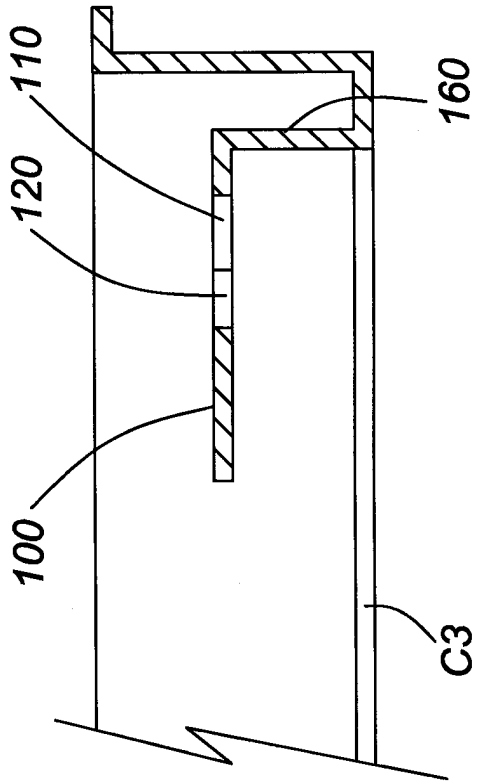

FIG. 4C

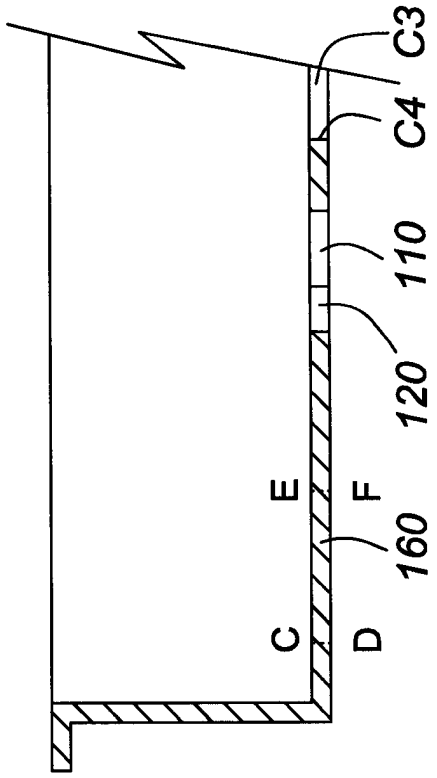

FIG. 4B

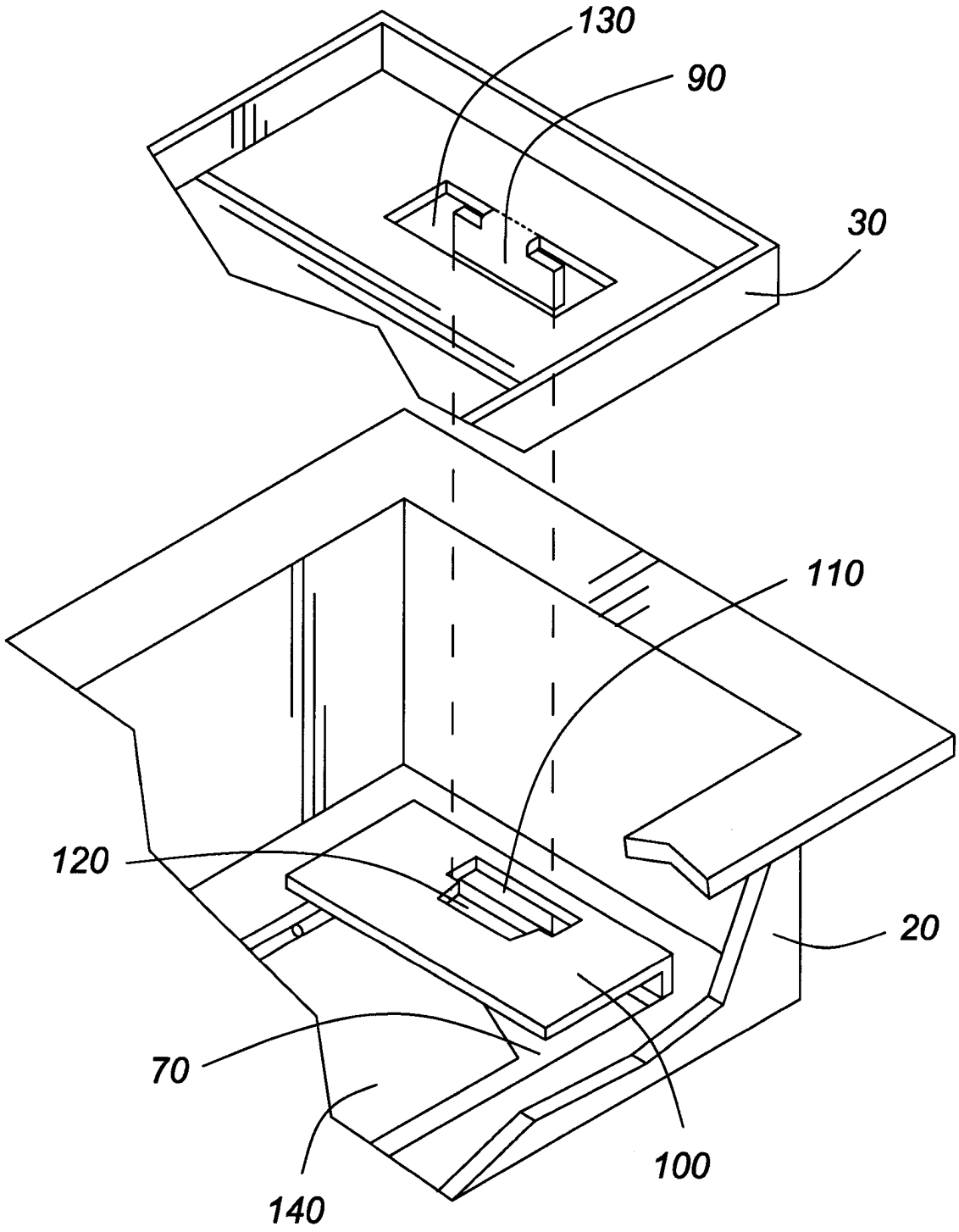

FIG. 5

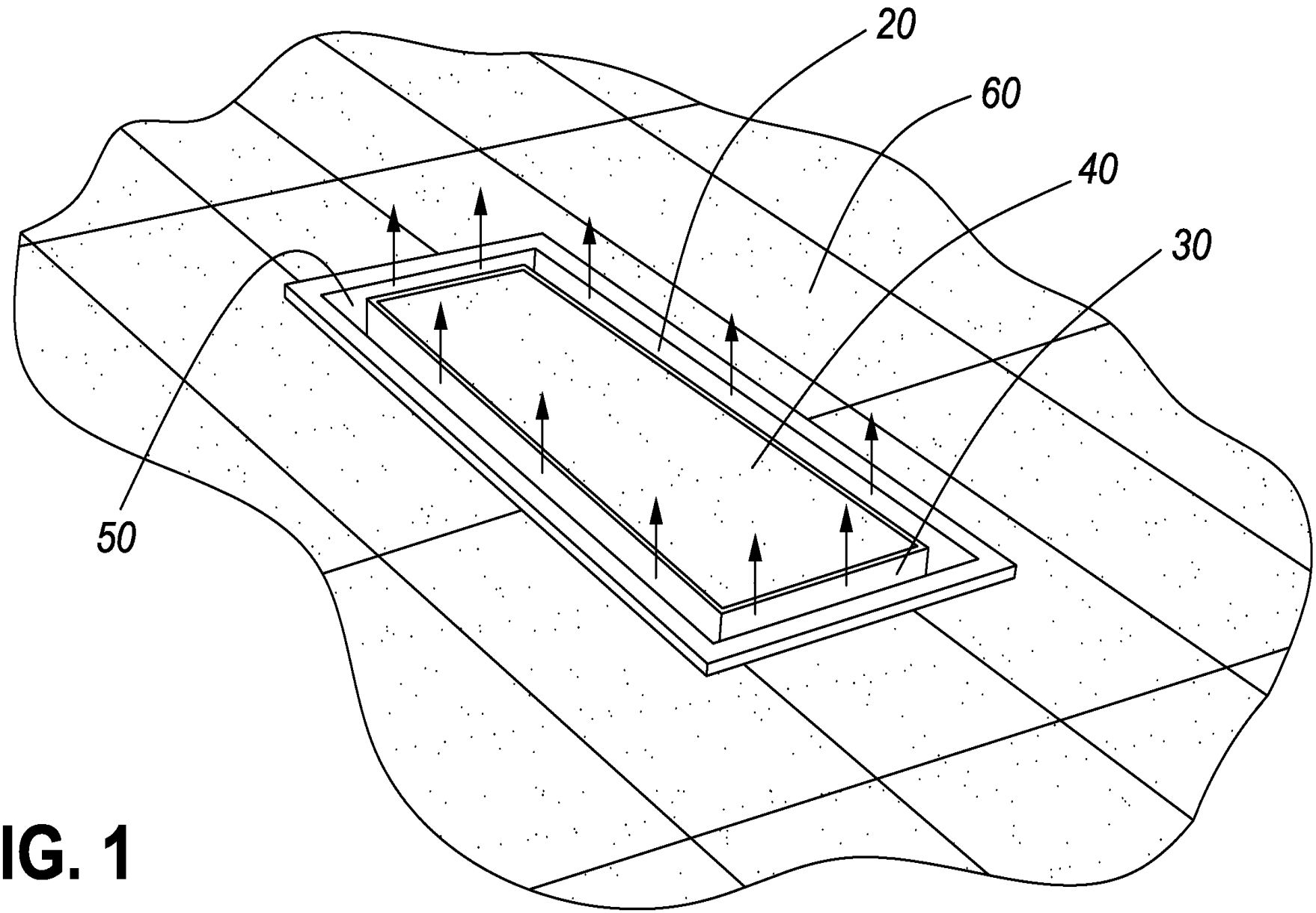

FIG. 1