

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte BRADFORD W. ALLEN, STUART LUBIN  
and STEVE MACKENZIE

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Appeal No. 2004-0785  
Application No. 09/252,635

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ON BRIEF

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Before STAAB, NASE, and BAHR, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 27, which are all of the claims pending in this application.

We REVERSE.

### BACKGROUND

The appellants' invention relates to modular systems and methods for assembling multiunit buildings, and particularly to systems and methods wherein individual units are constructed from multiple vertically stacked modules (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Hopkins, Jr. (Hopkins)

4,513,545

Apr. 30, 1985

Claims 1 to 12 and 22 to 27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hopkins.

Claims 13 to 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hopkins.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection (Paper No. 11, mailed October 18, 2001) and the answer (Paper No. 18,

mailed February 24, 2003) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 17, filed December 31, 2002) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied patent to Hopkins, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

#### **The anticipation rejection**

We will not sustain the rejection of claims 1 to 12 and 22 to 27 under 35 U.S.C. § 102(b) as being anticipated by Hopkins.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.

Cir.), cert. denied, 484 U.S. 827 (1987). The inquiry as to whether a reference

anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v.

Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

Claims 1, 8 and 22, the independent claims subject to this ground of rejection, read as follows:

1. A multiunit building, comprising:  
multiple connected units, each unit being formed by two prefabricated modules, a first module comprising a floor and four wall sections, and a second module comprising a ceiling and four wall sections, wherein the second module is stacked vertically atop the first module and connected thereto, and wherein a room of the unit so formed extends from the floor section of the first module to the ceiling section of the second module.

8. A method of building construction, comprising:  
constructing a foundation;  
placing a first module comprising a floor and four wall sections above the foundation;  
placing a second module comprising a ceiling and four wall sections atop the first module; and  
securing the second module to the first module to form a building unit, wherein a room of the unit so formed extends from the floor section of the first module to the ceiling section of the second module.

22. A method of constructing a modular building, comprising:  
installing a first unit comprising a first corridor section and a first horizontal utility chase section, wherein the first utility chase section contains a utility feed;  
installing a second unit comprising a second corridor section and a second horizontal utility chase section containing a utility feed;  
connecting the units so that the first corridor section and the second corridor section combine to form an access corridor, and the first utility chase and the second utility chase combine to form a continuous utility chase; and

connecting the utility feed of the first unit and the utility feed of the second unit for supply of utility services to the units.

*Teachings of Hopkins*

Hopkins' invention is directed to a prefabricated structure of at least two stories comprised of a vertically stacked modular core and interlocking system of panelized component room elements erected upon a monolithic concrete slab. The subject modular core is composed of three units each built upon a base pallet and featuring pre-finished walls, cabinets, appliances, fixtures, floor coverings and containing an integrated plumbing, mechanical and electrical system which services the dwelling. The core modules and plurality of room elements are manufactured utilizing mass production techniques and transported to the building site. The lower core module contains a kitchen, central hallway, a portion of the staircase, and powder room facilities. Panelized room elements appended to the front and rear of the lower core form a living room and dining/den area. The middle core unit contains a bath with laundry facilities and corridor for internal circulation between two bedrooms subsequently formed by panelized room elements appended to the front and rear sides. The upper core module forms a floored attic area containing heating and air-conditioning equipment and hot water heater. Access to the upper core module (attic) is accomplished by means of a pull-down staircase/ladder mounted in the floor. The concrete slab foundation contains a preformed central depression which branches

outward from the core extending to the rear exterior wall in the form of a trough which enables the subsequent connection of plumbing drain pipes, water lines and electrical conduit following erection of the structure. A complex of similar dwelling units can be established by placing a plurality of the structures side-by-side, in a linear configuration, thus forming a row of townhouses or offices.

Figure 1 is a perspective view of the monolithic slab 2 for a structure of two or more stories having a prefabricated core comprised of a plurality of modules the lower module 1 of which has been set in place in a preformed slab depression 3. Figure 2 is a perspective view of the middle core module 4 directly above the lower core module and panelized hallway wall element 5 set in place at the second floor level opposite the middle core module 4 thus completing the rectangular proportion and making the planar floor perimeter identical in form to that of the lower core module 1. Figure 3 is a perspective view of the placement of the upper core module 6 upon the stacked lower and middle core modules. The central roof 7 of the subject structure is formed by the top of upper core module 6. Preassembled stair component 8 is then set in place upon concrete slab 2 and attached to the lower core module 1, thus completing the staircase 9.

Referring now to Figure 4, the next step in the erection process is the installation of panelized interior party wall elements 10 and 11 which are securely fastened to the concrete slab 2 and lower core module 1. Panelized exterior wall element 12 is then attached to the lateral end extremities of panelized interior party wall elements 10 and 11. Figure 5 depicts the placement of panelized floor elements 13 and 14 which interlock with the lower and middle core modules 1 and 4 and span outwardly to panelized exterior wall element 12 upon which the floor elements 13 and 14 structurally bear. Figure 5 further illustrates a pre-fabricated notch 15 in panelized floor element 13 which provides head clearance above stair component 8 attached to staircase 9. Also shown in Figure 5 is the placement of panelized interior party wall element 16 which is attached to slab 2 and lower core module 1. A corresponding party wall element 17 (not shown in Figure 5) is attached to slab 2 and lower core module opposite wall element 16. Panelized exterior wall element 18 is then fastened to the lateral end extremities of interior party wall elements 16 and 17.

Referring now to Figure 6, second floor panelized interior party wall elements 19 and 20 are respectively installed upon and fastened to panelized floor elements 13 and 14. The subject wall elements 19 and 20 are similarly secured to the middle core module 4. The next step in the erection process is the placement of second floor panelized exterior wall element 21, which is fastened on its bottom end to the upper

side of floor elements 13 and 14, and on either end to the lateral end extremities of second floor panelized interior party wall elements 19 and 20. Installation of panelized floor elements 22 and 23 occurs simultaneously above panelized interior party wall elements 16 and 17, wherein floor elements 22 and 23 interlock with lower and middle core modules 1 and 2 and span outwardly to panelized exterior wall element 18 upon which floor elements 22 and 23 structurally bear. Figure 7 illustrates the placement of second floor panelized interior party wall element 24, which is fastened to panelized floor element 23 on its bottom end and to middle core module 4 on its inner end. A corresponding party wall element 25 (not shown in Figure 7) is similarly fastened to panelized floor element 22 on its bottom end and attached to middle core module 4 on its inner end, opposite wall element 24. Second floor panelized exterior wall element 26 is then fastened to the outer end extremities of second floor interior party wall elements 24 and 25.

Referring now to Figure 8, four panelized roof elements 27, 28, 29, and 30 are installed at an angle extending downwardly and outwardly from the lower edge of the central roof 7, upper core module 6, to the top edges of both front and rear second floor panelized exterior wall elements 21 and 26. External roofing material 31 in the form of asbestos, asphalt, slate, metal, fiberglass shingles, or other suitable waterproofing material is applied to the upper surface of the central roof 7 and panelized roof elements

27, 28, 29 and 30 as illustrated in Figure 9. Gutters 32 are installed at the lowest edges of the roofing at the point of intersection of the finished facade 33 and finished rear elevation 34. Finished facade 33 and rear elevation 34 are composed of weatherboards, wood siding, vertical or horizontal tongue and groove siding, aluminum siding, stucco, brick or other suitable building material. Figure 9 further depicts finished side wall 39 which provides a permanent weather-proof surface covering the ends of lower core module 1, middle core module 4, upper core module 6, panelized interior party wall elements 11 and 16, and second floor panelized interior party wall elements 20 and 24.

Utilities servicing the structure are fed through the preformed trough depression 67 in the monolithic concrete slab 2, shown in Figures 10 and 12, until they intersect and connect within lower module base pallet 112. The utility connections are more fully shown in Figures 16, 17, 22, 23, 28, 29, 34, 35, and 37.

As shown in Figures 12 and 15-18, the lower core module 1 includes a lower module base pallet (i.e., floor) 112 and four outer walls but no ceiling. As shown in Figures 12, 15 and 22-24, the middle core module 4 includes a floored base pallet 123 and four outer walls but no ceiling. As shown in Figures 12, 15 and 28-30, the upper

core module 6 includes an upper module base pallet (i.e., floor) 127, four outer walls and a central roof (i.e., ceiling) 7.

*Our decision*

After reviewing the subject matter of claims 1, 8 and 22 and the teachings of Hopkins, we conclude that claims 1, 8 and 22 are not anticipated by Hopkins. Claims 1 and 8 are not anticipated since Hopkins does not teach "a room of the unit so formed extends from the floor section of the first module to the ceiling section of the second module." The only module disclosed by Hopkins that includes a ceiling is the upper core module 6. Since Hopkins' upper core module 6 also includes a floor, Hopkins does not disclose any room of the unit that extends from the floor of a first module to the ceiling of the upper core module. Claim 22 is not anticipated since Hopkins does not teach "connecting the units so that the first corridor section and the second corridor section combine to form an access corridor, and the first utility chase and the second utility chase combine to form a continuous utility chase." As shown in Figure 10, the corridors and utility chases of one unit (i.e., townhouse) do not combine with the corridors and utility chases of another unit (i.e., townhouse) to form an access corridor and a continuous utility chase.

Since all the limitations of claims 1, 8 and 22 are not disclosed in Hopkins for the reasons set forth above, the decision of the examiner to reject claims 1, 8 and 22, and claims 2 to 7, 9 to 12 and 23 to 27 dependent thereon, under 35 U.S.C. § 102(b) is reversed.

### **The obviousness rejection**

We will not sustain the rejection of claims 13 to 21 under 35 U.S.C. § 103 as being unpatentable over Hopkins.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claim 13, the independent claim subject to this ground of rejection, reads as follows:

A multiunit modular building, comprising:

multiple connected units, each unit comprising a module having a corridor section and a module comprising a horizontal utility chase section, whereby the corridor sections connect to form an access corridor and the utility chase sections connect to form a horizontal utility chase containing a utility feed.

In the rejection of claim 13, the examiner (answer, p. 5) determined that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hopkins' unit layout so as to create utility chases positioned that run across adjacent units to increase size and access from different units."

Clearly the examiner has not met the initial burden of presenting a prima facie case of obviousness since the examiner has not presented any evidence that would have led one of ordinary skill in the art to have modified Hopkins to arrive at the claimed invention. Evidence of a suggestion, teaching, or motivation to modify a reference may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), Para-Ordinance Mfg., Inc. v. SGS Importers Int'l., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), cert. denied, 117 S. Ct. 80 (1996), although "the suggestion more often comes from the teachings of the pertinent references," In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). The range of sources available, however, does not diminish the requirement for

actual evidence. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone, is not "evidence." See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002). See also In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Since the examiner has not presented a prima facie case of obviousness with respect to claim 13 for the reasons set forth above, the decision of the examiner to reject claim 13, and claims 14 to 21 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 12 and 22 to 27 under 35 U.S.C. § 102(b) is reversed and the decision of the examiner to reject claims 13 to 21 under 35 U.S.C. § 103 is reversed.

REVERSED

LAWRENCE J. STAAB	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
JEFFREY V. NASE	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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JENNIFER D. BAHR	)	
Administrative Patent Judge	)	

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