

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 12

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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

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Ex parte WILLIAM PAUL and CAROL PAUL

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Appeal No. 2003-0414  
Application No. 09/833,831

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ON BRIEF

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Before FRANKFORT, 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 and 3 to 6, which are all of the claims pending in this application.

We REVERSE and REMAND.

BACKGROUND

The appellants' invention relates generally to suspended ceiling grid structures and, more particularly, to cross tees exhibiting linear measurement markings and for use in a grid structure (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

O'Brien et al. (O'Brien)	3,374,596	Mar. 26, 1968
Cubbler, Jr. et al. (Cubbler)	3,979,874	Sep. 14, 1976
Blubaugh et al. (Blubaugh)	6,269,595	Aug. 7, 2001

Claims 1 and 3 to 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cubbler in view of O'Brien and Blubaugh.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the answer (Paper No. 10, mailed September 9, 2002) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 9, filed August 21, 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 prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 and 3 to 6 under 35 U.S.C. § 103. Our reasoning for this determination follows.

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 combine the relevant teachings of the references 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).

### **The claimed subject matter**

Claim 1, the only independent claim on appeal, reads as follows:

A measurement system incorporated into a cross runner for use in a suspended grid structure extending within a walled enclosure, the grid structure supporting a plurality of ceiling tiles, said system comprising:

a plurality of main runners and means for suspending said main runners from a ceiling in parallel, spaced apart and elongated extending fashion, each of said main runners defining, in cross section, a tile support lip and a web extending from said support lip, a plurality of elongated channels being formed through first and second opposite faces of said web at axially spaced apart intervals and between a first end and a second end;

a plurality of interconnecting wall angles secured to selected surfaces of said walled enclosure, each of said wall angles having an elongated body which includes, in cross section, a first side and a second side extending from an interconnecting edge with said first side;

a plurality of cross runners extending between a selected wall angle and a selected main runner, each of said cross runners defining, in cross section, a tile support lip and a web extending in substantially perpendicular fashion from a midpoint of said support lip, at least one of first and second connector clips extending from associated first and second ends of each of said cross runners; and

a measurement indicia applied at selected intervals along each of said cross runners and being capable of identifying, upon positioning of said cross runner, a correct linear and measured distance between said selected main runner and said wall angle and which is less than an overall length of said cross runner, an end portion of said cross runner capable of being sectioned prior to inserting engagement of a selected and remaining connector clip with said selected main runner and abutting engagement of said sectioned end portion with said wall angle, said measurement indicia further comprising a first linear marking at a center point of each of said cross runners, at least one additional linear marking extending from said center point and at equidistant locations towards said first and second ends of said cross runner.

## **The teachings of the applied prior art**

### *Cubbler*

Cubbler's invention relates to a grid system for supporting ceiling panels or the like of the type which includes a plurality of longitudinal beams in a spaced parallel relation with each longitudinal beam including a plurality of main runners in aligned connection with each other, and a plurality of cross runners in parallel spaced relation normal to and interconnecting adjacent parallel longitudinal beams. Each main runner includes an intermediate elongated web portion having a longitudinally extending reinforcing bead portion along one longitudinal edge thereof and a longitudinally extending flange portion along the opposite edge portion thereof for supporting ceiling panels or the like. Each cross runner includes an intermediate elongated web portion having a reinforcing bead portion extending along one edge portion thereof and a flange portion extending along the opposite edge portion thereof for supporting ceiling panels or the like.

Referring now to the drawings, and to Figures 1 in particular, the suspended ceiling system includes a grid system 10 for supporting ceiling panels. The grid system 10 includes a plurality of longitudinal beams 12 aligned in spaced parallel relation, with each longitudinal beam 12 comprising one or more main runners 14 in aligned connection with each other. The grid system 10 further includes a plurality of cross

runners 16 positioned in parallel spaced relation normal to and interconnecting adjacent parallel longitudinal beams 12. Figures 8-12 illustrate a means for rigidly interconnecting two aligned cross runners 16 to a respective longitudinal main runner 14 disposed therebetween and in normal relation thereto. The main runner 14 to which the cross runners 16 are to be connected includes a vertically oriented slot 94. Each cross runner 16 includes a tongue portion 74. In order to rigidly interconnect the two cross runners 16 and the main runner 14, the two cross runners 16 are held in longitudinal alignment and the respective tongue portions 74 are inserted through the slot 94 in the main runner 14 from opposite sides of the main runner 14, one at a time and connected together.

*O'Brien*

O'Brien's invention relates to a suspended ceiling structure. As shown in Figures 1 and 6, the suspended ceiling structure includes a plurality of ceiling panels 10 supported within a suspended grid comprising wall members 11, main runners 12 and cross members 13. The entire grid is suspended from the ceiling 14 by means of plurality of vertical wires 15 which are looped through spaced holes 15a which are formed in the main runners 12. The periphery of the suspended grid is formed by the plurality of wall members 11 which are of L-shaped cross section with the vertical leg of the L being fitted against the sidewall and the horizontal leg extending outwardly from

the wall for supporting the main runners 12 or cross members 13 resting thereon. The main runners 12 and the cross members 13 are all of inverted T-shaped in cross section so as to form a vertical fin 20 or 21 extending upwardly from a pair of horizontal flanges 22 or 23.

*Blubaugh*

Blubaugh's invention relates, in general, to a wallboard or drywall system, and, in particular, to a wallboard or drywall system marked with a grid system to facilitate the installation of wallboard or drywall and utilizing two types of vapor barriers. As shown in Figure 2, each wallboard panel 2 has a gridwork consisting of vertical lines 5 and horizontal lines 6. Where the lines 5, 6 cross they form a square 8. This gridwork pattern can be printed, or applied by any other conventional method, in any color on the back of the panel 2. Each of the squares 8 measure one inch on each side, and the total number of squares can vary from 48 by 96 to 48 by 144 depending on the size of the wallboard. Since the squares are one inch on each side, it will be easy and convenient for workers to cut panels without resorting to marking the panels using conventional measuring instruments (tape measure) and pencil or chalk lines. This will minimize the amount of time required to install drywall.

As shown in Figure 3, each of the squares 8 is further marked with dimension lines 11, 10 along the vertical line 9 and the horizontal line 12. The mark 10 represents 1/8 inch and the mark 11 represents 1/4 inch. Therefore, these additional dimension markings will make it convenient for workers to make accurate cuts which fall in between the 1 inch markings. The Figure 4 embodiment is similar to the Figure 3 embodiment except the markings 10', 11' are placed along the edges of the square 8' and not along the lines 9, 12. In all other respects, the markings 10', 11' function in the same manner as the markings 10, 11.

### **The obviousness rejection**

The examiner ascertained (answer, pp. 4-5) that Cubbler does not disclose either (1) a plurality of interconnecting wall angles as claimed, or (2) measurement indicia as claimed.<sup>1</sup> With regard to these differences, the examiner then determined (answer, pp. 5-6) that it would have been obvious to one having ordinary skill in the art at the time the invention was made to (1) incorporate O'Brien's wall angles into Cubbler's system and (2) incorporate Blubaugh's teaching of measurement indicia into Cubbler's system.

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<sup>1</sup> After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

### **The appellants' argument**

The appellants argue (brief, pp. 4-7) that there is no suggestion, absent the use of their disclosure, for a person of ordinary skill in the art at the time the invention was made to have applied the measurement indicia taught by Blubaugh into Cubbler's suspended ceiling system.

### **Our determination**

When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the appellants. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The extent to which such suggestion must be explicit in, or may be fairly inferred from, the references, is decided on the facts of each case, in light of the prior art and its relationship to the appellants' invention. As in all determinations under 35 U.S.C. § 103, the decision maker must bring judgment to bear. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the appellants' structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the appellants' combination would have been obvious. In re Gorman, 933 F.2d 982, 986, 18 USPQ2d

1885, 1888 (Fed. Cir. 1991) (citations omitted). That is, something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. See In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984).

In our view, the only suggestion for modifying Cubbler's suspended ceiling system to include measurement indicia stems from hindsight knowledge derived from the appellants' own disclosure and not from the teachings of the applied prior art. On page 7 of the answer, the examiner relied upon the common knowledge that cross runners of ceiling grid systems often need to be cut to fit into the spaces around the edges of a room to supply the motivation for combining the teachings of Blubaugh's measurement indicia into Cubbler's suspended ceiling system. However, in the rejection before us in this appeal, the examiner did not include such knowledge as part of the evidence relied upon for establishing obviousness under 35 U.S.C. § 103. Accordingly, we will not consider such evidence.

For the reasons set forth above, the applied prior art does not suggest the claimed subject matter. Accordingly, the decision of the examiner to reject claims 1 and 3 to 6 under 35 U.S.C. § 103 is reversed.

REMAND

We remand the application to the examiner to further consider the patentability under 35 U.S.C. § 103 of claims 1 and 3 to 6 in light of the teachings of Cubbler, O'Brien, U.S. Patent No. 4,927,696<sup>2</sup> to Berg and U.S. Patent No. 5,687,526<sup>3</sup> to Benvenuto et al. (Benvenuto).

The teachings of Cubbler and O'Brien have been set forth above.

Berg's invention relates to materials for use fabrication. Berg teaches (column 1, lines 8-20) that

In every manufacturing industry materials of various types are fabricated to form products. The industries themselves are extremely diverse, ranging from the garment making industry to the construction industry. The common element in all of these industries is the handling of the materials. The materials must be measured, marked and then cut to the correct size. It is a common convention to check every measurement before cutting as an incorrect cut can result in material becoming unusable. The greatest cost component in most fabrication applications is the cost of labour. The described measuring and marking is understandably time consuming and labour intensive.

Berg further provides (column 2, lines 40-54) that

The invention will not be described with reference preferred embodiments illustrated in FIGS. 1 through 7. The invention relates to material having premarked reference markings on the material uniformly spaced such that the

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<sup>2</sup> Cited in the examiner's first Office action (Paper No. 5, mailed January 31, 2002).

<sup>3</sup> Copy attached.

markings can be used for measurement. The materials which have been selected for the purpose of illustration are materials common in the construction industry. It will be recognized that the teachings are equally applicable to other industries. The type and extent of markings will, of course, vary depending upon the desired application. The intent is to reduce the time required during installation to measure, mark or cut the materials. For some applications the marking must be extensive to accomplish this purpose, for other applications a very elementary marking system may be used. FIGS. 1 through 7 illustrate applications and variations on the general principle.

Benvenuto teaches (column 1, lines 43-60) that

In one conventional track system, after marking the height of the ceiling to be installed, a wall angle molding is attached to the walls around the inside perimeter thereof at the point where the ceiling is to be installed. The moldings are cut to length and the outside corners mitered. Main T support members must then be cut to length so that cross-T slots line up with cross-T points of the previously installed molding. The main Ts run parallel to the room center line and are perpendicular to the ceiling joists. Metal hangers are installed which support the main Ts. The main T is typically provided in sections which are connected together to form a continuous run. Cross-Ts are then installed which run perpendicular to the main Ts to form a grid that supports the individual ceiling tiles or panels. Again, the cross-Ts must be measured and cut to the proper dimensions and are then locked into the main Ts. In most instances the Ts are fabricated of metal and must be cut with tin snips or the like with any burrs and sharp edges being filed off as necessary.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 and 3 to 6 under 35 U.S.C. § 103 is reversed. In addition, the application has been remanded to the examiner for further consideration.

REVERSE and REMANDED

CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
JEFFREY V. NASE	)	APPEALS
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	)	INTERFERENCES
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