

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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

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Ex parte LEANDRE ADIFON et al.

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Appeal No. 2006-0004  
Application No. 09/497,359

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ON BRIEF

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Before McQUADE, 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 20, which are all of the claims pending in this application.

We REVERSE.

### BACKGROUND

The appellants' invention relates to elevators and, more specifically, to an elevator system structural support for providing reaction forces to bolt tension and moment forces associated with elevator components attached to a building structure (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

Claims 1 to 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,899,300 to Miller et al. (Miller) in view of U.S. Patent No. 3,395,777 to Rodosta.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the answer (mailed March 22, 2005) for the examiner's complete reasoning in support of the rejection, and to the brief (filed March 17, 2004) and reply brief (filed May 26, 2005) 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 to 20 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 independent claims under appeal read as follows:

1. An elevator system comprising:  
an elevator assembly disposed within a hoistway and suspended by elevator ropes having ends suspended with respect to a pair of rigid structures affixed to opposing walls of the hoistway; and  
a compression member positioned between said rigid structures in such a manner so as to counter resultant forces applied to said rigid structures due to a vertical load.

11. A method of countering load reaction forces in a pair of rigid structures affixed to opposing walls of a hoistway caused by a vertical load attributable to an elevator assembly suspended from said rigid structures, said method comprising
  - providing a compression member; and
  - positioning said compression member between points on said rigid structures from which said elevator assembly is suspended.
  
14. An elevator system comprising:
  - an elevator assembly disposed within a hoistway;
  - a pair of load bearing structures affixed to opposing walls within the hoistway and from which the elevator assembly is suspended by elevator ropes;
  - and
  - a compression member positioned between said load bearing structures in such a manner so as to counter non-vertical components of forces applied to said load bearing structures due to suspension of the elevator assembly.
  
17. An elevator system comprising:
  - an elevator assembly disposed within a hoistway;
  - a pair of load bearing structures affixed to opposing walls within the hoistway and from which the elevator assembly is suspended; and
  - a compression member positioned between said load bearing structures in such a manner so as to counter non-vertical components of forces applied to said load bearing structures due to suspension of the elevator assembly.

Miller's invention relates to traction drive elevators, and more particularly to mounting apparatus and methods for traction machines of such elevators. Miller's invention is directed to an elevator system which includes a traction machine mounted on a beam that is functionally separate from the guide mechanism for the elevator and that extends to the pit. As a result of this method of mounting, loads on the traction

machine are transferred to the pit of the hoistway, and thereby to the foundation of the building. Miller teaches (column 2, line 37, to column 3, line 44) that:

Illustrated in FIG. 1 is an elevator system 10 having a car 12 mounted in a car frame 14, a pair of car guide rails 16, a counterweight 18, a pair of counterweight guide rails 22, a plurality of ropes 24, a traction machine 26, a governor 28 and a pair of mounting beams 32.

The car frame 14 is engaged with the car guide rails 16 for movement through the hoistway (not shown). The guide rails 16 define a guide mechanism for the motion of the car 12. The guide rails 16, as shown more clearly in FIG. 2, are T-shaped and include contact surfaces 34 on one leg 36 of each guide rail 16. The car frame 14 include a conventional means to engage the contact surfaces 34, such as guide shoes or rollers.

The counterweight 18 is engaged with the counterweight guide rails 22 for movement through the hoistway. The counterweight guide rails 22 define a guide mechanism for the motion of the counterweight 18. As with the car guide rails 16, the counterweight guide rails 22 are T-shaped and include contact surfaces on one leg of each guide rail. The counterweight 18 includes a conventional means to engage the contact surfaces, such as guide shoes or rollers.

The plurality of ropes 24 are engaged with the car frame 14 and the counterweight 18. The ropes 24 extend down from a first dead-end hitch 38, underneath the car frame 14, back up and over a traction sheave 42, down to the counterweight 18 and back up to a second dead-end hitch 44. Engagement between the car frame 14 and the ropes 24 is via a pair of tandem car sheaves 46 disposed underneath the car frame 14. Engagement between the counterweight 18 and the ropes 24 is via a sheave 48 mounted on the counterweight 18. As a result, the configuration shown in FIG. 1 is a 2:2 roping. Although shown as such, it should be noted that the present invention may be used with other roping configurations.

The pair of beams 32 extend through the hoistway on opposite sides of the car frame 14. The machine 26 is disposed at the top of one 52 of the pair of beams 32, as shown in FIG. 3. This beam 52 includes a mounting plate 54 to which the machine 26 is fixed by a plurality of fastening bolts 56. The machine 26, as shown illustratively in FIGS. 1 and 3, is a disc type electric motor 58 and

includes the integral traction sheave 42. Rotation of the motor 58 causes the traction sheave 42 to rotate and drive the ropes 24.

Mounting the machine 26 on the beam 52 permits the machine 26 to be positioned within the hoistway, thereby eliminating the need for a machineroom. In addition, the beam 52 transfers the load of the machine 26 and the load from the engagement between the traction sheave 42 and the ropes 24 directly to the pit 62 of the hoistway. As a result, the machine 26 may be positioned at the top of the hoistway and the loads may be carried by the foundation of the building that houses the elevator system 10.

The other beam 64 is used to conveniently mount the governor 28 and its associated tension frame 66, and provides a termination point to fix the dead-end hitch 38 for the ropes 24. By fixing the dead-end hitch 38 to the beam 64, the loads from the ropes 24 are transferred through the dead-end hitch 38 to the beam 64, and thereby to the pit 62 of the hoistway and foundation of the building. This permits more of the elevator 10 loads to be transferred directly to the foundation using the beams 32 as conduits for the loads.

Each of the beams 32 is a structural stress, I-shaped structure, as shown more clearly in FIG. 2, and includes a pair of flanges 68,72 and a cross-member 74. A benefit of using such an I-beam as the mounting beam is that such structures are readily available, are relatively inexpensive, and have well known strength characteristics. Other structural members having different configurations and formed from different materials, however, may also be used to support the traction machine 26 and elevator 10 loads. In addition, each beam 32 may be a single, integral member as shown, or may be formed from a plurality of segments joined end-to-end to extend through the hoistway.

Rodosta's invention relates to automobile lift devices, and more particularly to a hydraulically-operated automobile lift assembly of the type provided with a platform slidably-engaged with upstanding posts at the corners of the assembly. A main object of the invention is to provide a novel and improved power-operated automobile lift

device which is relatively simple in construction, which is easy to control, and which provides uniform lifting force at the respective four corner portions thereof so that the platform will be maintained substantially horizontal when being elevated. Rodosta teaches (column 2, lines 8-30) that:

Referring to the drawings, 11 generally designates an improved power-operated automobile lift assembly constructed in accordance with the present invention. The assembly 11 comprises four hollow corner posts 12, 13, 14 and 15 which are rigidly-fixed to the floor, for example, by the provision of base flanges 16 on the posts through which anchoring bolts 17 may be engaged so as to rigidly-secure the posts in upstanding vertical positions. The posts are shown as being square in cross-section, but obviously, may have any other desired cross-sectional shape. Posts 12, 13, 14 and 15 are arranged to define a substantially rectangular enclosure with the posts 12 and 13 and the posts 14 and 15 at the opposite end thereof. The posts 14 and 12 are rigidly-connected at their top ends by a longitudinal tie rod 18 and posts 15 and 13 are similarly rigidly-connected at their top ends by another longitudinal tie rod 19. The top ends of the end posts 12 and 13 are rigidly-connected by a transverse tie rod 20. The transverse tie rod 20 comprises a hollow tube having a shaft 21 axially secured therein, as by the provision of bearing collars 22 and 23 in the opposite end portions of the tubular tie rod 20, as shown in FIGURE 3.

In the rejection before us in this appeal, the examiner determined (answer, p. 3) that:

It would have been obvious to one having ordinary skill in the static structure art at the time the invention was made to have positioned a compression member between the pair of rigid structures of Miller's elevator system [i.e., Miller's beams 52 and 64] as taught by Rodosta to prevent the rigid structures from bending due to non-vertical load.

The appellants argue throughout the brief and reply brief that there is no motivation to combine the applied prior art so as to arrive at the claimed subject matter. We agree. This is due to the disparate nature of the applied prior art. In that regard, while Miller and Rodosta are both broadly elevators, they are each concerned with vastly different types of elevators. In our view, the only suggestion for modifying Miller in the manner proposed by the examiner to arrive at the subject matter under appeal stems from hindsight knowledge derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

A critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the

invention taught is used against its teacher." Id. (quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the appellants. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In the current appeal, there is just no motivation, suggestion or teaching in the applied prior art that would have made it obvious at the time the invention was made to a person having ordinary skill in the art to have modified Miller so as to arrive at the claimed subject matter.

For the reasons set forth above, the decision of the examiner to reject claims 1 to 20 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 20 under 35 U.S.C. § 103 is reversed.

REVERSED

JOHN P. McQUADE  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

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