COMMISSIONER'S DECISION

Obviousness - Velcro connectors for panels dividing open-plan offices

The edge portions of panel dividers are made from velcro so the panels can be quickly fastened together or separated, without the use of connecting rods. The claims were found too broad in scope, but the application was accepted.

Final Action - Reversed, but only newly amended claims accepted.

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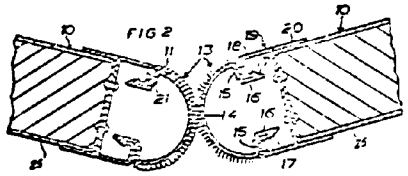
Patent application 190,328 (Class 20-32), was filed on January 16, 1974, for an invention entitled "Hinge Devices For The Interconnection of Preferably Panel-Shaped Furnishing Components." The inventor is Torsten F. Bergstrom. The examiner in charge of the application took a Final Action on March 1, 1978, refusing to allow it to proceed to patent. In reviewing the rejection, the Patent Appeal Board held a Hearing on July 5, 1978, and at which the applicant was represented by Mr. M. Sher. Also in attendance was Mr. K. Miller, an expert in this field.

The application relates to hinge devices for interconnecting panels used to divide open-plan office space or industrial workshops into smaller units. Figure 2 below shows that arrangement.

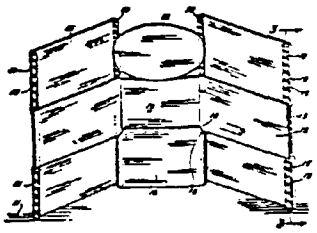


The hinge portion is made of velcro(13) so that adjacent panels can be quickly fastened together or separated.

In the Final Action the examiner rejected the application for failing to define patentable subject matter over the following United States patents:

3,571,999	Mar. 23, 1971	Downing
3,592,288	July 13, 1971	Walters

The patent to Downing shows the use of "Velcro" to unite display panels to upright frame members or supports. The velcro is applied to the support in a helical path along the circumference of the tubular support and in a straight line on the panel. Figure 1 below shows that invention:



The Walters patent was cited to show panels having edge arrangement so that clips can be secured to the edges of the panels in a manner somewhat similar to that achieved by the applicant.

In the Final Action the examiner argued that the applicant failed to disclose a patentable advance in the art over the cited references. He goes on to say that the hook-shaped fastening arrangement is known in the furniture art. He also stated (in part):

> The patent to Downing shows the use of "Velcro" to unite display panels to upright frame members or supports. In Downing's case the "Velcro" is put on the support in a helical path along the circumference of the tubular support and in a straight line on the panels per se. Applicant provides tape on either side edge of panels so that it matches with the mating tape on another panel. Applicant uses curved section members to support the tape. This curved section is semi-circular in section and is attached to the edge of the panels via hook shaped devices 17 in such a manner that the tape edges are captured and held between the curved section and the frame per se. This type of fabric or material fastening is very well known in the furniture business and does not involve any inventive ingenuity. As far as the curved section expedient is concerned, this is exactly what Downing has in his tubular post idea. He in fact achieves the same advantages as the applicant - the ability to rotate the panels about a curved surface while maintaining contact.

The applicant in his response to the Final Action had this to say, inter alia:

> ...
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> Prior to discussing the Downing patent, Applicant wishes to describe briefly his invention. In particular, Applicant's invention is directed to a divider panel which can be employed in combination with other similar panels or pieces of furniture to divide up an office or industrial area into smaller units. The Applicant's panel has a cooperating member mounted along at least one vertical edge of the panel, the cooperating member releasably supporting a member having a curved section. The curved outer surface of the latter member supports one of a complementary pair of tapes adapted to form a tape fastener. Opposite ends of the curved member have engaging means for releasably retaining the member in contact with the cooperating member mounted along the at least one vertical edge of the panel. The tape member mounted on the curved outer surface of the curved member is adapted to engage a second tape situated on a respective surface, such as a curved section of another panel, whereby an angle of contact of the panel relative to the surface can be varied while maintaining contact between the surface and the panel.
>
> The Applicant's invention provides an improved and less expensive connecting device between panels or between a panel and another piece of furniture, the connecting device simultaneously serving as a hinge means between the panels which can be easily separated without additional tools. A further advantage of employing the curved vertical members on the panels is that more than two panels can be connected to each other at the same pivot point by employing the appropriate tapes on the respective vertical edges of the panels.
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> ...
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> The drawback associated with the use of Velcro as a tape fastener is that the holding power of the Velcro decreases after repeated assembly and disassembly of the tape fasteners. Be that as it may, it is not seen how this fact can adversely affect the question of the patentability of the claims in the present application, not one of which recited the use of Velcro as a tape fastener. Further, lines 7 to 9 of page 5 of the disclosure presently on file, clearly indicates that the tape fasteners employed can have mushroom-shaped projections which engage each other when they are joined together. It is therefore unclear how the Examiner can, in any way, conclude that his allowance of Application Serial No. 238,682 should preclude the Applicant from obtaining patent protection in Canada in respect of the subject matter of the present application.
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> ...

The consideration before the Board is whether or not the application is directed to a patentable advance in the art. Claim 1 reads:

> For use in a panel, a member having a curved section, an outer surface of which supports one of a complementary pair of tapes adapted to form a tape fastener; opposite ends of the curved section having engaging means adapted to releasably retain the member in contact with a cooperating member situated along a vertical edge of the panel, whereby the tape on the member is adapted to engage a second tape situated on a respective surface whereby an angle of contact of the member with respect to the surface can be varied while contact is maintained between the member and the surface, the member having the curved section comprises a substantially semi-cylindrical frame element extending a height of the vertical edge of the panel.

At the Hearing Mr. Sher argued that an invention was indeed described in the disclosure, but that he was willing, if necessary, to amend the claims to more specifically define the invention. Mr. Miller gave an excellent demonstration of the alleged invention and discussed many stages of the prior art, the problems encountered and how they were overcome.

Our first observation is that this is a crowded art and cited patents, at first blush, appear pertinent. We feel however, that in such a crowded art we should not expect a major step forward. This point was also argued by Mr. Sher.

On a complete study of the specification we do find some advantages over the prior art, e.g., the applicant has completely illuminated the need for a corner post member, the ends of each panel are made such that they form curved vertical members, a tape is secured to the curved members which tape acts as both a connecting member and hinge means. The applicant also argues that by using the curved vertical members on the panels more than two panels can be connected to each other without a corner member at the same pivot point. The demonstration by Mr. Miller showed at least four panels being hingedly secured at the same pivot point.

At the Hearing Mr. Miller pointed out that the product has "substantial commercial success." It is trite law however, that it is the precise form of the invention defined in the claim of the application or patent which is to be considered in gauging the effect of commercial success (vide, Wildey and White Mfg. Co. Ltd. v H. Freeman and Lebruk Ltd. (1931) 48 R.P.C. 405 at 414, and Omark Ind. (1960) v Gouger Saw Chain Co. (1964) 27 Fox P.C.1 at 22).

We are not persuaded that the present claims define the precise form of the invention being marketted which must be considered in gauging the effect of commercial success. The scope of monopoly sought is too broad. We are satisfied, however, that the applicant has described in his specification a new combination which, in our view, required ingenuity for fruition. But we are not satisfied that the claims clearly define the extent of monopoly to which protection may be granted, and for that reason we agree with the examiner that the claims are too broad in scope. At the Hearing Mr. Sher suggested that we should consider present claim 6, which is a more restricted claim than claims 1 to 5. Some suggestions were also made at the Hearing to amend claim 6 to more specifically define the invention.

In order to expedite proceedings Mr. Sher was contacted by phone and further amendments were suggested to claim 6, to be presented as new claim 1, which would, in our view, more clearly define the proper scope of monopoly of the invention described. An amended claim 1 was submitted to the Board on Oct. 16, 1978 and reads:

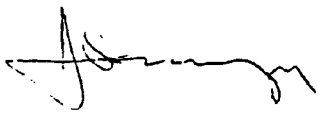
> A panel comprising: a cooperating member mounted along at least one vertical edge of the panel, the cooperating member releasably supporting a semi-circular frame element, an outer surface of which supports one of a complimentary pair of tapes adapted to form a tape fastener; opposite limbs of the frame element having projections releasably retaining the frame element in contact with the cooperating member, said frame element further having shoulders to receive and retain said tape, whereby the tape on the outer surface of the frame element is adapted to engage a second tape situated on a respective surface whereby an angle of contact of the panel relative to the surface can be varied while maintaining contact between the surface and the panel.

Claims 2 and 3, which depend on new claim 1, were also added to the application.

In the circumstances, no further discussion is necessary because, in our view, amended claims 1 to 3 now properly define the extent of monopoly to which protection may be granted. We recommend that the decision in the Final Action to refuse the application be withdrawn and that amended claims 1 to 3 be accepted.

J. E. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have reviewed the prosecution of this application and agree with the recommendation of the Patent Appeal Board. Accordingly, I withdraw the rejection made in the Final Action refusing the application, but I do not accept the claims on file. I will, however, accept amended claims 1 to 3. The application is returned to the examiner for resumption of prosecution.



J.H.A. Gariepy
Commissioner of Patents

Dated at Hull, Quebec

this 24th. day of November, 1978

Agent for Applicant

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