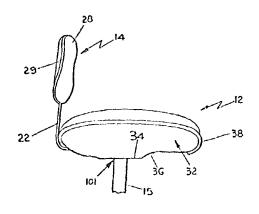
Obviousness: Secretarial Chair

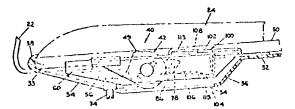
The applicant uses the inner sleeve member of the rubber torsion mounting of a chair to support the chair back. The prior art arrangement uses the outer sleeve the rubber torsion member of this support. This permits recessing the working parawithin the seat, but that is a matter of design rather than invention. Final Action: Affirmed

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated November 21, 1975, on application 140,872 (Class 155-48). The application was filed on April 28, 1972, in the name of Bernard J. Fries, and is entitled "Chair."

The Patent Appeal Board conducted a Hearing on September 9, 1977, at which Mr. A. Graham, and also Mr. J. Mitchell (the applicant's American agent) represented the applicant.

In this application the applicant is seeking a patent for a tiltable office chair. In particular he claims a secretarial chair provided with an adjustable back which tilts away from the seat. The adjustment means for controlling and limiting the degree of tilt is concealed under the seat within a recess, and is fitted with a molded plastic cover which hides the working mechanism from the observer when the chair is viewed in profile. It is, consequently much more attractive than a chair where all the working parts are exposed. Figures 1 and 8 illustrate the application.

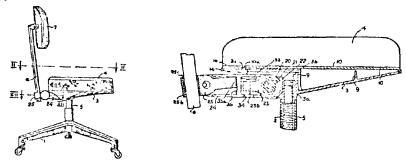




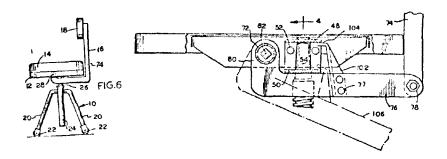
In his Final Action the examiner refused the applications for failing to define patentable subject matter over the following patents:

United States		
3,111,343	Nov. 19, 1963	Pearson
Canadian		
669,631	Sept. 3, 1963	Lie
71,339	May 14, 1901	Frazer

The Pearson patent is also for a secretarial chair. The adjustment means for this chair is concealed in the seat-supporting shell which is anchored to the spindle base by a hub arrangement. Figures 1 and 3 of Pearson are shown below.



Lie describes a secretarial chair in which a torsion bar-pivot assembly is used to control the tilt of the back portion. Figures 3 and 6 of Lie illustrate his invention.



The Frazer patent is for a chair in which the pivoted tiltable back portion is restrained by a compressed coil spring mounted under the seat.

In the Final Action the examiner stated (in part):

The patent to Fraser shows a relatively flat mechanism for pretensioning the pivotal movement of the backrest of a chair. Fore and aft movement of the backrest is also taught therein.

It is held as entirely obvious to cover up an unsightly pivot member with a plastic shell which is merely added on and, in the words of applicant's December 3, 1973 reply:

"The cover has nothing to do with the chair control itself, other than to conceal it ... has absolutely nothing to do with the operability of the chair control".

Applicant argues that this concept is in no way disclosed or suggested by the prior art.

In reply to this, cloth, vinyl, molded plastic and sheet metal parts are commonly used to conceal unsightly parts and their use does not amount to invention.

To cover up the pivot member of the patent to Fraser would merely produce the obvious result of enhancing the appearance in profile, as applicant states, it goes not make the chair operate better or even differently as a chair. Furthermore the patent to Lie shows in figure 6 a profile of a chair wherein the control means of figure 3 is concealed by frame 12.

Further details in the claims of the pivoted torsion member are obvious in view of the patent to Pearson which shows a rubber in torsion member having inner and outer members, the backrest being connected to the outer member. The use of an ear extending from the backrest mounting bracket is obvious in view of the abutments of the patent to Lie. The use of abutments for stops is well known.

All claims are therefore rejected as directed to unpatentable material in view of the applied references. It cannot be said to be inventive to cover up unsightly parts with that which merely performs as a cover. The advantages of a cover are well discussed in the patent to Pearson. Applicant states that the cover is shaped in accordance with the seat shell. However, this is considered to be a matter of appearance only, and design for appearance is not patentable per se.

In his responses to the Final Action the applicant stated (inter alia):

Because the cover which is called for in broad claim 1 deviates from the configuration of the hidden interior shell member, the cover defines the shape of the chair seat. Rather than being conformed to the shape of a chair control, thereby constituting simply a cover for the chair control, the outer cover member employed in the present invention actually defines a hidden recess into which the chair control member can be secreted. An opening in the cover member, spaced from the shell, allows one to insert the control into the hidden recess and allows access to the control if necessary.

This concept is not in any way suggested by the prior art. The Examiner says that the advantages of a cover are well discussed in Pearson. However, Pearson does not employ any cover member. Pearson simply employs a conventional torsion member in which the housing 3 has a forwardly sloping portion. The housing 3 itself is necessary to support the control member. Pearson's support housing 3 is necessary to the operation of the control. The control is not independent of the support housing 3 and in fact the two are integral parts of the control. Housing 3 very clearly looks like and is a support housing for the control and is always clearly visible in the Pearson chair.

The same is true in Lie. The perimeter frame 12 on the Lie chair which the Examiner mentions in passing certainly does not suggest a cover member which deviates downwardly in contour below an interior shell member to define a hidden recess between the cover and the shell. There is no such hidden recess in Lie and in fact, the chair control member of Lie is largely visible when the chair is viewed in profile (see Fig. 3 and Fig. 6).

In Fraser, the chair control mechanism is also clearly visible. There is nothing comparable in Fraser to a shell which appears to be the support for the seat, but which actually deviates in contour from the real supporting shell to create a secret, hidden recess therebetween into which the chair control is secreted.

. . .

The concept of fixing the inner member to the support housing, allowing the outer member to rotate when the tiltable mounting means is tilted, and mounting the tiltable member mounting bracket on the ends of the inner member between the ends of the outer member and the housing rather than over the outer member, is not in any way suggested by Pearson. Nor are the ear stops extending from the tiltable mounting bracket to engage the top and bottom plates of a spindle holder in any way remotely suggested by Pearson.

Further, such arrangement is not suggested by Lie. Lie relates to an entirely different type of torsion control in which a torsion bar is employed rather than inner and outer members with a rubber pack therebetween. Further, the stop member employed by Lie does not constitute ears projecting from the mounting bracket, but rather constitutes a separate bracket secured to the tiltable mounting bracket which has a flange extending between the top and bottom members of the spindle holder.

Nor is Fraser any more pertinent relative to the claimed details of the unique low profile control means of the present invention. Fraser simply discloses an archaic coil spring mechanism.

We have considered the prosecution of this application and the arguments made at the Hearing. The issue which the Board must determine is whether the application is directed to a patentable advance in the art, or conversely, if it is obvious. Claim 1 of the application reads as follows:

In an improved chair having a base, a seat member, and a control means for controlling the tilt of at least a portion of said chair, the improvement comprising: said seat member including an internal shell and a molded plastic cover member for enclosing at least the bottom portion of said shell; said control means being secured to said shell and being operable independently of said cover when mounted on said shell; said cover deviating downwardly in contour below said shell defining a hidden recess between said cover and said shell and enclosing said control means within said hidden recess so that it is recessed within the underside of said seat member to preclude its visual appearance when said chair is viewed in profile; said downwardly deviating portions of said cover defining an opening spaced from said shell through which chair support means can pass; chair support means passing through said opening and being operably connected to said shell.

The applicant contends that his chair is made attractive by the moulded plastic cover which projects downwardly below the internal seat shell. He states that the "employment of a cover member which actually deviates from the contour of a hidden inner shell member to give the appearance that it is the bottom of the chair, and which has nothing to do with the operation of the chair control," is not suggested by the prior art.

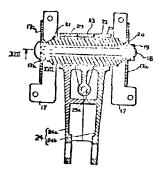
Considering the Pearson patent, we find in column 1, line 45 ff., that "It is a further object of the present invention to provide a chair of the type described in which all the adjustments are made by mechanisms which are for the most part concealed." Pearson's cover shell is of sufficient strength to act as the seat support housing for the torsion anchoring member and the chair spindle, whereas the applicant's cover shell is primarily for concealment and asthetic purposes. A contour view of Pearson (Fig. 1) reveals a chair with a "soft appearance" similar to that contemplated by the applicant.

At the Hearing the applicant argued that he has a new concept in seat construction. This concept involves a back support torsion control means wherein the inner torsion member extends beyond the outer member. The inner member is anchored to the support housing. According to the applicant this arrangement produces a "low profile appearance", when used with the cover member.

If we analyse the arrangement of the torsion control we find the following components:

- 1) an inner tubular member (or inner sleeve),
- 2) an outer tubular member (or outer sleeve), and
- 3) a cylindrical rubber body positioned coaxially between (1) and (2). The rubber body is in effect bonded to the surfaces so that relative rotational movement between 1 and 2 places it under torsional strain.

Figure 14 of Pearson is shown here to illustrate the torsion arrangement he employs.



The inner sleeve 20 is anchored to the chair by plates 17. A cylindrical rubber torsion member is bonded to the inner sleeve 20 and outer sleeve 21. Lever Arm 24 which carries the seat back is pivoted about the outer sleeve on hubs 29. A torque arm 23 is fixed to sleeve 21 by a suitable bonding agent, and a set screw through aperture 23(2) serves as the chair back tension control.

It is the applicant's opinion that by mounting the back bracket member on the extended ends of the inner tube he is able to keep these in the same plane and obtain a lower profile. This would be true if there was no torque arm required. However, applicant's use of a torque arm sleeve around the outer torque sleeve is similar to that shown in Pearson (23 in Figure 14). Consequently since this torque arm sleeve is in a plane which surrounds the outer torque sleeve, the profile contour will be governed by the size of the torque arm sleeve. We can see no difference in the applicant's arrangement and Pearson's in this respect.

Another feature which the applicant stresses as important to attain his low profile is his use of a spindle holder that is in the same plane but displaced horizontally from the torsion member. Lie's arrangement also has the spindle holder spaced horizontally from his torsion unit. Similarly, Pearson's spindle holder is horizontally adjacent to the torsion member and provides the same desired effect as obtained by the applicant.

The applicant emphasized that his back mounting bracket has an ear which projects past the torsion member and fits into the slot of the spindle holder to act as a stop. Pearson's back mounting bracket has two end projections similar to the applicant's ears which also serve to limit the rotation of the member. Lie's chair uses a flanged bracket which engages a plate to act as a limit stop. We find no novelty in applicant's stop arrangement.

Claim 1, the only independent claim in the application, specifies that the control means is secured to the seat shell, and is concealed by a cover over the seat shell. Securing of the control means to the seat (as done by the applicant) or to the cover (as done by Pearson) is not a result which can be considered inventive. Any individual viewing the applicant's chair in profile would be unaware of the the location of the chair control anchorage, just as he would if he viewed Pearson's chair.

All the remaining claims, which depend on claim 1, do not add any new or patentable feature to claim 1.

In our view the structural variations in the claims are of the type referred to by Mr. Justice Maclean, in <u>Niagara Wire Weaving v. Johnson Wire</u> Works Ltd. (1939) Ex. C.R. at 273:

Small variations from, or slight modifications of, the current standards of construction, in an old art, rarely are indicative of invention; they are usually obvious improvements resulting from experience and the changing requirements of users.

and at page 276:

No step is disclosed there which could be described as invention. There is not, in my opinion, that distinction between what was known before, and that disclosed ... that called for that degree of ingenuity requisite to support a patent. If those patents could be supported it would seriously impede all improvements in the practical application of common knowledge.

In summary we are satisfied that the claims and the application as a whole fail to disclose a patentable advance in the art. Any differences between the alleged invention and the prior art are minimal. We recommend that the decision in the Final Action be affirmed.

G.A. Asher Chairman

Patent Appeal Board, Canada

Having considered the arguments of the applicant and the findings of the Patent Appeal Board, I now reject the application. If any appeal under Section 44 of the Patent Act is contemplated, it must be taken within six months of the date of this decision.

J.H.A. Garrepy \ \ Commissioner of Patents

Dated at Hull, Quebec this 13th. day of October, 1977

Agent for Applicant Scott & Aylen 77 Metcalfe St. Ottawa, Ont.