Posture Correcting Chair

-A Brief Report-

Kulsoom Rizavi

Field of the Invention

The present invention relates to furniture, particularly an improved posture correcting chair for maintaining and checking proper sitting posture of a person.

Background of the Invention

Chairs are the most common furniture on which people sit, work and take rest. Some people do not use the chair in a correct manner and this leads to deformation of spine. Poor posture can lead to postural instability (e.g., lack of balance) for example, as a person ages and/or when the person is injured. Other causes for postural instability can include the return of a person from a zero gravity environment , a lack of exercise, and/or an injury.

CN 201929455 U talks about a posture correcting chair belonging furniture, mainly to solve the existing user sitting chair cannot be constrained problems. It includes Legs, the seat and back, characterized in that said back has a front center position of the pressure sensor , a back corner of the alarm, the pressure sensor is electrically connected with the alarm. The utility model is able to alert people to maintain the correct posture develop good habits, providing people with convenient.

Despite the aforementioned prior art there is a need for an improved posture correcting chair that is inexpensive and can maintain the posture of a person by generating an automatic alarm and further activate the television/screen with a light and touch sensor once the user sits on the seat.

Summary of the Invention

The present invention relates an improved posture correcting chair for maintaining and checking proper posture of a person by generation of an automatic alarm that starts ringing in case the person is sitting in a wrong posture and a touch and light sensor that activates the television once the person back touches the seat. The major components of the chair are seat, legs, armrest, backrest, handle, alarm and sensor.

Objective of the Invention

The main objective of the present invention is to provide an improved posture correction chair that helps in maintaining correct posture of a person.

Another objective of the present invention is to provide an improved posture correcting chair that is simple is design and low in cost.

Yet another objective of the present invention is to provide an improved posture correcting chair that generates an automatic alarm in case the person is sitting in an incorrect posture.

Yet another objective of the present invention is to provide an improved posture correcting chair that has a light and touch sensor that gets activated once a user's back touches the seat of the chair resulting in switching on the television.

Working of the Invention

As illustrated in Fig 1, the present invention relates improved posture correcting chair for maintaining proper posture of a person. The said invention comprises a seat, a leg , an armrest, a backrest, a handle, an alarm and a sensor.

According to a preferred embodiment of the present invention, the seat of the chair is attached to the four legs of the chair to which a handle is connected that can adjust the height relatively to the seat of the chair. There are armrests fixed to both sides of the chair .The backrest is associated to the seat of the chair. An alarm and a light and touch sensor are present on the back of the chair and are electrically connected

According to another embodiment of the present invention firstly the person will sit on the chair. Secondly, in case the person is sitting on the chair in a wrong posture, an automatic alarm will start ringing. Thirdly the alarm will keep ringing unless the person does not sit in the correct posture on the chair. Once the person sits in the correct posture the alarms stops ringing. According to another embodiment of the present invention the light and touch sensor is attached in line with a television or screen. The sensor gets activated once the persons back touches the seat of the chair thus making a remote automatically functional. When the person moves away from the seat , the light sensor activates the television in a standby mode. The invention has been described

with respect to a limited number of embodiments, these should not be construed as limitations on the scope of the invention, but rather as exemplifications of some of the embodiments. Those skilled in the art will envision other possible variations, modifications, and applications that are within the scope of the invention.

Advantages of the Innovation

- Keeps bones and joints in the correct alignment so that muscles are being used properly.
- Prevents the spine from becoming fixed in abnormal positions.
- Saves the cost of future medical treatment due to abnormal posture.
- Helps making working more efficient in offices and similar institutions
- Further development in the innovation, provides in-depth data regarding the user's posture that can be used for medical analysis.

Drawbacks of the Innovation

- High initial cost
- Susceptible to wear and tear
- Battery-life

Commercialization of the Innovation

STMicroelectronics, a leading manufacturer of semiconductors globally, has engaged with Honey Bee Network and National Innovation Foundation to help develop improved prototypes of grassroots technologies. A prototype of the posture correcting chair, was developed by the STMicroelectronics team for which suitable modifications are being discussed to explore the possibility of integrating this chair in tractors with the help of John Deere, leading agricultural, construction, forestry machinery manufacturing company in the world.