Idea Description:
The Orthopedic (postural) Mouse

Introduction:

The idea to create an orthopedic mouse originated from the lack of a serious proposal with respect to Repetitive Strain Injuries (RSI) and/or postural diseases. Based on a totally ***new and revolutionary shape*** that ***complies with classic medical knowledge*** [1, 2, 3] and ***modern science*** [4, 5, 6, 7, 8], the use of the mouse finally becomes both healthy and ***uncommonly comfortable*** for users. It has been clinically tested for over a year, proving itself ***100% innocuous***. I am positive that consumers will notice the product's inherent value, which will enable it to become the industry standard.

Problem:

As you are probably aware, the existing shapes of computer mice are the direct cause of innumerous RSI related problems (e.g. tendonitis, bursitis, and Carpal Tunnel Syndrome – CTS). Various mouse manufacturers have their ergonomic solution(s) to the problem. Such products were conceived to make the task less stressful to the user. However, this definition implies improvement, not perfection. In fact, the effectiveness of ergonomic devices is yet to be seen, since *the number of people suffering from postural diseases does not cease to increase*. According to a 1995 study by the Occupational Safety and Health Administration (OSHA), 1 in every 6 users suffers from serious injuries (in a universe of 350 million that would amount to 60 million users). Allan Williamson, a spokesman for the National Council on Compensation Insurance Inc., calls our attention in an article published by the New York Times on October 9, 1995, mentioning the alarming fact that "...worker's compensation claims related to RSI are up 770% from 10 years ago..."

The idea:

After extensive studies on the matter, and considering the exorbitant costs translated to the economy as well as to our society, I have drawn the conclusion that the path followed so far for the design and conception of computer mice is the wrong one. As a medical doctor, it is obvious to me that there must be a morphological and functional link between the mouse and the hand and forearm [3, 4, 5]. It is fair, then, to attribute the new shape's success to a change in paradigm.

Conception:

First, instead of trying to adapt a pre-existing shape, I have created a totally new one, which complies with *classic medical knowledge* and *modern science* (both relative to form and function of the hand and forearm and their respective pathologies). Second, to that new shape, I incorporated the necessary mouse functions without altering the shape and/or the basic and primary objectives pursued. In this way, I have been able to build a mouse that is totally harmless.

Conclusion:

The Orthopedic (postural) Mouse is different from any other alternatives due to five main points: (I) A new and revolutionary shape which (II) complies with classic medical knowledge and (III) modern science; (IV) extraordinary comfort; (V) 100% innocuous.

In addition, the ease of development, minimal manufacturing costs, and an outstanding market potential are signs that the product is prone for success.

Although financial gains are the most important factor in the decision process, I urge you to consider another key aspect: the image. A Company that manages to significantly change injury statistics related to mouse use would be perceived as socially responsible.

References

Books:

1. Raoul Tubiana: The Hand, 1985
2. Eduardo A. Zancolli, Elbio Cozzi: Atlas of Surgical Anatomy of the Hand
3. Dreyfuss H.: The Measure of Man. Human Factors in Design, NY, 1960
4. Maldonado T.: El Diseño Industrial Reconsiderado, Barcelona, 1977
5. Pevsner A.: The Sources of Modern Architecture and Design, London, 1968

Articles:

6. David Rempel Et Al: "Effects of Forearm Pronation and Suppination on Carpal Tunnel Pressure", J. Hand Surg. 1998, 23A:41
7. David Rempel, Peter J. Keir, W. Paul Smutz, Alan Hargens: "Effects of Static Fingertip Loading on Carpal Tunnel Pressure", J. of Bone and Joint Surg. Inc., 1997, 15:422-426
8. Noah D. Weiss: "Position of the Wrist Associated with the Lowest Carpal Tunnel Pressure: Implications for Splint Design" J. of Bone and Joint Surg. Inc., 1995, 77A:1695