

Provisional Patent Specification – Fans with disappearing frame segments

I. Fans with disappearing frame segments

- (a) Fans have “disappearing” frame segments on the top and/or bottom of the fan, so that the blades come as close as possible to the top and/or bottom of the enclosure they are located in, maximizing fan blade size to the available space in the enclosure. This means that the external dimensions of the entire fan assembly will not be square, but in fact wider in the horizontal than in the vertical. This allows for a larger fan blade to be used in a fan that is located in an enclosure and therefore doesn't need an encompassing frame to protect the fan from foreign objects or to protect foreign objects from the spinning fan blades.
- (b) Fans are often made of plastic: plastic frame and plastic blades. These fans will have soft touch plastic at least on the bottom and top of the frame, so as to damp vibrations coming from the fan, minimizing the amount of vibrations transmitted to the rest of the computer server and its components. Also, this soft touch plastic, a common material often found in car dashboards and other consumer products, will aid in holding the fans in place. For fans made of metal or other material, a thin coating of soft touch plastic, or other vibration damping material such as rubber or silicone, can be applied to the frame material to achieve the same result.