

Due on 11/30 with oral presentation.

An elliptical cross trainer is a device used to guide the feet along a generally elliptical shaped curve to simulate the motions of jogging and climbing. Read US patent no. 6,090,013 show in Fig. 1.

- (1) Draw the functional representation of this device.
- (2) Use mechanism creation methodology to find a new mechanism or mechanisms based on this mechanism. Define your own engineering criterion such that an optimal design can be determined. Explain your engineering criterion.
- (3) Use CAD software to simulate its motion.

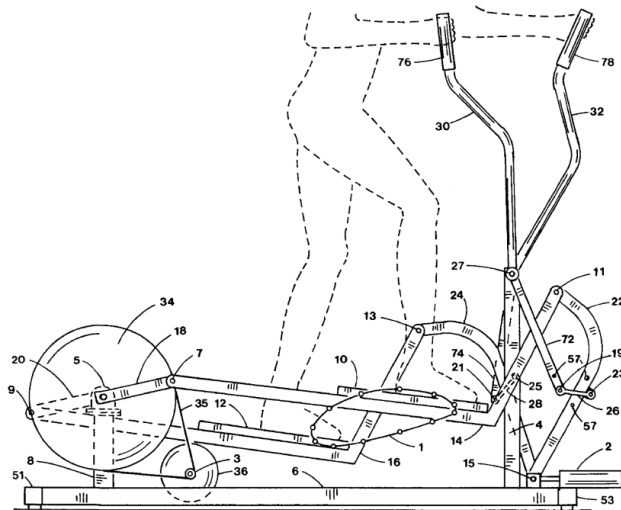


Fig. 1 US patent no. 6,090,013

Reference

1. US patent no. 6,090,013
2. Taiwan patent M431718 (新型專利)

Note: The US patent [1] is different from Taiwan patent [2].