

# OPART

## Unique hinging mechanism for eyewear

### Industries for this invention

- Optometry
- Eyewear industry

### Innovation Status

TRL 5  
Early prototype demonstrated

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### Invention

The invention consists of a unique hinge mechanism as an alternative to existing spectacle hinge configurations. This mechanism facilitates customisation of spectacle frames while also reducing costs associated with customisation.

### Problem Solved

The majority of eyewear frames uses hinging systems that are attached with screws to the temple arms. A shortcoming when using screws is that they often fall out or break. This is the most common repair work done on spectacles. Existing screwless hinging systems are complex to fit and repair and usually limited to expensive spectacle frames, often requiring specialised labs and technicians. A solution is to produce a cost effective hinging mechanism that will alleviate the shortcomings of both the screw and screwless hinging systems.

### Application

Manufacturing simplified eyewear that has the potential to be customised, is easy to assemble and repair and more affordable to the end user.

### Advantages/Value proposition

- Simple to manufacture
- Easy to fit and repair
- Extended life of hinging mechanism
- Possibility of affordable customisation of eyewear

