

## New original total knee prosthesis

### Domaines d'application

Orthopedic surgery - knee prosthesis - geriatry

### Contexte

Knee prosthesis are widely used to reduce handicaps and improve quality of life (100 000 surgery per year in France). The surface of pieces rubbing against each other are currently in plastic (high density polyethylene). After a 10 years follow-up, results are relatively good (90% of success) but not as good as we would like at 20 years. When using this type of knee prosthesis it is recommended to stop sport and reduce physical activities in order to avoid the usury of the device.

### Description de la Technologie

This new prosthesis is realised using friction torque made of a ceramic original alloy, which enables to improve resistance of the prosthesis. It also includes the use of an original mobile plate technique. This invention could be a major technological progress as younger patients could access this type of knee surgery. After 20 years of follow-up, the risk to undergo a new surgery could be also decreased.

### Stade de Développement

Prototype in development

### Propriété Intellectuelle

FR Patent