Patent Factsheets: Description

The basis of a UK patent application is a legal document called a specification. Its contents determine whether a patent can be granted. You would be well advised to seek professional assistance when preparing your patent application. A patent specification includes:

- a full description of your invention, plus any drawings referred to
- one or more claims.

This factsheet tells you about the description. An example is shown overleaf. Other factsheets in this series explain how to prepare **claims**, **drawings**, and an **abstract** (which is another essential part of an application).

Description

Content

The description must explain your invention **fully** at the time of filing because information cannot be added later. A patent **will not** be granted if your description does not contain sufficient information to enable others to construct or perform your invention.

Your description should begin with a **short title** which indicates the general subject of your invention. The title should **not** include the inventor's name, a trade mark or other fictitious name, or the word "patent" or "etc". Also it should **not** give away the essential details of your invention.

A typical description begins by setting out the **background** of the invention and often then explains a particular **problem** that your invention **solves**, and what it **does**.

It may then summarise the essential features of your invention, and some important but not essential features.

This is then followed by an **introduction to the drawings** (if any), indicating in a few words what each drawing illustrates.

The rest of the description describes (with more detailed reference to any drawings), one or more **particular examples** of how the invention may be performed.

Page 2 of the example overleaf contains a **detailed** outline of the invention. Do not feel that you have to limit this part of the description. Most detailed descriptions will need to extend to **several** pages.

Important features are indicated in the drawings using **reference numbers**. These numbers are then used in the description to refer to those features.

The same reference number should always be used to refer to the same feature.

Do not include text that is not directly concerned with your invention.

Style and presentation

The description **should** be in English or Welsh. The Office will provide a translation of any material filed in Welsh. Type (or print) the pages of your description on **one** side only of separate sheets of white A4 paper.

Leave **margins** of at least 2.0cm.

Join the pages together with a paper clip or bulldog clip at the top centre of the pages. Please do **not** join the pages by stapling.

Number the pages of text in order, e.g. 1, 2, 3, 4, at the top of each page (but below the margin) in the middle of the page.

Description:Typical Example

Page numbering

Title providing an indication of the invention

Introduction and background to the invention

Summary of the invention, also known as a ‘statement of invention’

Optional features

Introduction to the detailed description

List of figures

1

Bicycle Stabiliser

This invention relates to a device for stabilising a child’s bicycle.

When children are learning how to ride a bicycle, an additional pair of stabilising wheels are often fitted either side of the bicycle’s rear wheel to prevent toppling of the bicycle.

However, the use of conventional stabilisers can lead to a number of difficulties. If a rigid stabilising unit is fitted to a bicycle, the rider can become reliant on the unit and will not learn how to balance the bicycle using their own body weight. Furthermore, on uneven ground there is a risk that the bicycle will become immobilised if the rear bicycle wheel loses contact with the ground, or that the stabilising unit will cause jolting of the bicycle. To overcome these problems, the present invention proposes a bicycle stabilising unit with attachment means for attaching the unit to a bicycle, a ground-engaging wheel which can freely rotate about an axis, and cushioning means such that the axis of the wheel can be displaced relative to the attachment means.

The cushioning means is preferably provided by a damped suspension strut, although the cushioning means may also be provided by other means, such as a torsion bar or spring.

The cushioning means may be adjustable so that the degree of cushioning can be modified to suit the terrain and the rider’s ability.

The stabilising unit may be retractable so that the ground-engaging wheel may be stored in a non-ground-engaging position.

The invention will now be described solely by way of example and with reference to the accompanying drawings in which:

Figure 1 shows a pair of stabilising units, one fitted either side of the rear wheel of a bicycle,

Figure 2 shows a stabilising unit with an alternative cushioning mechanism,

Figure 3 shows a stabilising unit with another cushioning arrangement.

Detailed description of an example of your invention

Reference numerals are used to indicate any illustrated features

2

In figure 1, a stabilising unit 1 includes a vertical number 2 which is attached to the side of a bicycle by mounting bolts 3, 4. The lower end of the vertical number is freely hinged to a substantially horizontal number 5 which carries a ground-engaging wheel 6. The wheel may be solid or may have an inflatable tyre. A strut 7 with a sprung shock-absorbing unit 8 is connected between the vertical and horizontal members, and this allows vertical displacement of the ground-engaging wheel in order to cushion impacts from an uneven road surface.

If two stabilising units are fitted, one either side of the bicycle’s rear wheel, then the rider will feel supported but will also develop confidence in leaning the bicycle over when negotiating a bend. The degree of cushioning can be varied by adjusting the compression of the shock-absorbing unit, using conventional adjusting means such as a screw-threaded end-stop.

The shock-absorbing strut 7 may be permanently attached to the vertical and horizontal numbers 2, 5 for instance using welded connections. Alternatively, the shock-absorbing strut may be easily detachable from one or both numbers, for instance by using a quick-release mechanism, allowing the ground-engaging wheel and the horizontal number to be folded away if the rider is confident enough to travel without the assistance of the stabilising unit.

Figure 2 shows an alternative embodiment in which the vertical and horizontal numbers 2 and 5 are rigidly attached to each other, for instance by using a rigid strut 9. The cushioning means is provided by mounting the ground-engaging wheel 6 in a sprung housing 10 on the outer end of horizontal number 5. The ground-engaging wheel is therefore vertically displaceable relative to the rest of the stabilising unit.

Figure 3 shows a further alternative embodiment in which the vertical and horizontal numbers 2 and 5 are connected via a hinge which includes a torsion spring 11. The torsion spring allows the horizontal number to rotate through a limited angle range.