the point that the invention is not obvious. There will be a short paragraph summarising the invention, which is often very similar to the first few claims.

The text then describes the invention in more detail. This part of the text may be headed "Description". Patent writers have two conflicting aims when writing the description. They need to set out in detail the invention for which they claim a patent, but they would prefer not to disclose information which won't be protected by the patent, that is, which is not covered by the claims.

Patent writers need to explain the invention sufficiently well for a skilled person to be able to reproduce it. As explained earlier, in return for granting a patent, a State expects the technology in the patent to be disclosed to the public. If the patent office decides that the disclosure is insufficient, they won't grant the patent. In the United States there is also a requirement to disclose the best way you know of carrying out the invention. This is called the "best mode". Bear in mind that the owner of the patent may have improved the invention since writing the patent and describing the "best mode".

One of the things that makes patents difficult to read is the inclusion of huge lists describing different options for the invention. For example, after saying that sugar should be used in a recipe, there may be a whole paragraph listing suitable sugars. When first reading the patent it is best to ignore those lists and come back to them when you need specific information. Similarly the patent description will often contain a whole series of seemingly repetitive ranges such as, "the reaction time should be between 1 and 100 minutes, preferably between 20 and 80 minutes, more preferably between 40 and 60 minutes." These may be repeated in the claims and like nearly everything in a patent they are included for a purpose. One reason for describing many options for the different aspects of the invention is to try and prevent a competitor later filing a patent for an improvement based on selecting a particularly beneficial option you did not describe. Another reason is that during examination the patent office may refuse some of the claims or may require the patentee to limit their claims to a narrower range. By this examination stage the patentee cannot introduce new material to the patent, so there has to be a basis in the description for anything added to the claims, hence the large amount of "back up" material found in some patent descriptions.

The description may also explain the meaning of key words and expressions. For example, if the term "chocolate-like masses" appears in the claims, you might see a phrase such as, "chocolate-like masses are suspensions of non-fat particles, such as sugar, milk powders and cocoa solids in a liquid fat phase". However, the terms in the claims are supposed to be clear without any further definition. For many countries in the European Patent system it is only the claims which are translated, so it is important that the claims are "self-explanatory".

Figures. Not all patents have figures or diagrams, but when they do they can be very helpful in understanding how the invention works. The figures have numbers on rather than text labels so you need to read the description to find

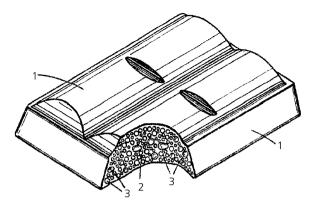


Figure 29.3 Example of a figure taken from GB 459 582, a Rowntree and Co. Ltd patent for aerated chocolate filed in 1935 (downloaded from the *Espacenet*® service of the European Patent Office).

out to what the numbers refer. This is done so that the drawings do not need to be altered when the patent is translated into different languages. These reference numbers will often appear in the claims. You may find it helpful to spend a few minutes adding labels to the figures before trying to understand them. An example of a patent figure is shown in Figure 29.3. To show that patenting inventions concerning chocolate is not new, the example is taken from a patent for aerated chocolate dating from the 1930s.

Examples. Many practical chocolate technologists find the examples the easiest part of the patent to understand. They are often in the form of recipes or process instructions, perhaps with measurements of the end-product to demonstrate the advantages of the invention. Not all patents have examples, but when they do it is important to realise that the patent claims probably cover more than just what is written in the examples or drawn in the figures. All the products described in the examples might be cakes, but that doesn't necessarily mean that the patent is restricted to cakes. To find out what is covered you need to read the claims!

29.3 Trade marks

Trade marks are signs that distinguish the goods or services of one company from another. For many companies a trade mark is a precious asset and can be worth millions of pounds. Probably the most valuable piece of intellectual property in the world today is the trade mark COCA-COLA®. It has been said that if all of the company's buildings, vehicles, factories and equipment were destroyed, Coca-Cola Inc. would emerge from the ruins and rebuild itself provided that the trade mark survived.

A trade mark has to be distinctive, and not likely to be confused with someone else's prior trade mark. A trade mark also has to be capable of being represented graphically, but this is not as limiting as you might first think. Words and logos are the most common trade marks, but colours, three dimensional shapes