

IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
PATENTS COURT

Rolls Building
Fetter Lane, London, EC4A 1NL

Date: 22 April 2013

Before :

THE HON MR JUSTICE ARNOLD

Between :

- | | |
|-----------------------------------|--------------------------|
| (1) NESTEC S.A. | <u>Claimants</u> |
| (2) NESTLÉ NESPRESSO S.A. | |
| (3) NESPRESSO UK LIMITED | |
| - and - | |
| (1) DUALIT LIMITED | <u>Defendants</u> |
| (2) PRODUCT SOURCING (UK) LIMITED | |
| (3) LESLIE ALEXANDER GORT-BARTEN | |

Simon Thorley QC and Benet Brandreth (instructed by **Bird & Bird LLP**) for the **Claimants**
Mark Vanhegan QC and Anna Edwards-Stuart (instructed by **Jensen & Son**) for the
Defendants

Hearing dates: 20-22, 25-27 March 2012

Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

.....
THE HON MR JUSTICE ARNOLD

MR JUSTICE ARNOLD :

Contents

<i>Topic</i>	<i>Paragraphs</i>
Introduction	1-4
The witnesses	5-12
Expert witnesses	5-7
Factual witnesses	8-12
Background	13-32
Portionised coffee machines	13-16
The Nespresso System	17
Nespresso capsules	18-20
Nespresso machines	21-24
Nespresso brewing units	25-31
Compact Brewing Unit (“CBU”)	26-27
Mini Brewing Unit (“MBU”)	28
Tolkien variants	29
Nano Brewing Unit (“NBU”)	30
Motorised Nano Brewing Unit (“MNBU”)	31
Dualit’s NX Café Caps	32
The Priority Document	33-50
The Patent	51-68
The claims as granted	69-70
Claim 1 as proposed to be amended	71
The skilled person	72-73
Common general knowledge	74-80
Construction	81-89
Against	82-83
Guide means being insertion slides	84-86
Receives and acts to move downwards	87-89
Priority	90-104
The law	90-94
Assessment	95-104
The housing	96
Inclined capsules	97-103
Conclusion	104
Added matter	105-109
Lack of novelty	110-124
The law	110
Novelty of claims 1, 2, 7 and 8 over the Priority Document	111
Novelty over the Venice Convention and the Field Tests	112-120
Field Tests	113-118
Venice Convention	119
Conclusion	120
Novelty of claim 1 over the 1,2,3 Spresso	121-124
Obviousness	125-140
The law	125
Obviousness over Blanc	126-140

Blanc	126-134
The differences – claim 1	135-136
Was it obvious – claim 1?	137-139
Obviousness of claims 2, 5, 7 and 8	140
Insufficiency	141-142
Amendment	143-146
Infringement: do the systems fall within claim 1?	147-152
Integer 1E	148-149
Integer 1M	150-152
Infringement: have Dualit committed infringing acts?	153-205
Statutory provisions	154-157
A person other than a licensee	158-167
Means relating to an essential element of the invention	168-176
Staple commercial products	177-182
Means suitable for putting the invention into effect	183-205
Summary of main conclusions	206

Introduction

1. The Claimants (collectively “Nestec”) are respectively the owner, exclusive licensee and alleged exclusive sub-licensee of European Patent (UK) No 2 103 236 (“the Patent”). Nestec allege that the First and Second Defendants (collectively “Dualit”) have infringed European Patent (UK) No 2 103 236 (“the Patent”) by supplying coffee capsules which are compatible with Nestec’s Nespresso coffee machines. Dualit deny infringement and counterclaim for revocation. Among the grounds of invalidity relied on are that the Patent is not entitled to its priority date, and therefore the claims are anticipated by two “prior uses” by Nestec (actually uses during the priority interval). The Claimants also allege that the Third Defendant, Leslie Gort-Barten, is jointly liable for any infringements by Dualit. Mr Gort-Barten does not contest that allegation.
2. The Patent was maintained in amended form by the Opposition Division of the European Patent Office for the reasons given in a written decision dated 6 July 2012. Both Nestec and the opponents appealed against that decision, thereby suspending its effect. I was informed that an expedited hearing of the appeal was requested in view of the fact that infringement proceedings were pending in a number of countries, but unfortunately the appeal has not yet been heard by the Board of Appeal. Nestec have made a conditional application to amend the Patent in accordance with the Opposition Division’s decision. Accordingly, I have to consider the Patent both as granted and as proposed to be amended.
3. The authentic text of the Patent is in French. Since the Patent is subject to the London Agreement, Nestec were not required to lodge an English translation of the specification with the United Kingdom Intellectual Property Office. Nestec obtained a certified translation for use in these proceedings which was eventually agreed. Nestec also obtained certified translations of the priority document and application which were agreed. I shall refer exclusively to the certified translations.
4. Between them the parties have raised a large number of issues for decision. Because of the number of issues, Dualit’s written closing submissions ran to 382 paragraphs

(not including a separate 11 paragraph schedule) despite the fact that the technology is relatively simple (Nestec's written submissions were shorter, but still lengthy). This case is a paradigm example of the regrettable tendency of current patent litigation in this country towards proliferation of issues rather than concentration upon the essentials. The result is unnecessary expenditure of both costs and the court's time. Accordingly, I shall give my reasons more briefly in relation to some of the more minor issues than in relation to the main issues.

The witnesses

Expert witnesses

5. Nestec's expert witness was Quintijn Innikel. He received a master's degree in Industrial Design and Engineering from Delft Technical University in 1991. From 1994 to 1999 he was employed in product development by Well Design, a design agency. During this period he worked on coffee machines, including Sara Lee's Senseo machine. From 1999 to 2005 he was employed by Heineken Beer. Since 2005 he has been a partner in Beacon Partners, and in that capacity he has again worked on coffee machines. Thus he was not working in the field of coffee machines in 2003-2004, although he said that he maintained an interest in the subject during that period.
6. Dualit's principal expert witness was Martin Nicholson. He had a degree in mechanical engineering with business. He was employed as a project engineer by Kenwood from 1993 to 2000. Since then he has run his own product design consultancy. He has worked on coffee machines in both capacities.
7. Both sides made minor criticisms of the other's expert in closing submissions. I consider that both experts did their best to assist the court.

Factual witnesses

8. Brigid Drohan is the Managing Director of the Third Claimant. She gave evidence about the Nespresso System, sales of Nespresso machines to the public and an alleged prior use of Nestec's Essenza coffee machines at a convention in Venice in June 2004 ("the Venice Convention"). Counsel for Dualit submitted in his closing submissions that Ms Drohan had been untruthful in her evidence. I am bound to say that I did not have confidence in the reliability of some of Ms Drohan's evidence, but I see no reason for concluding that she was being untruthful.
9. Rosa Bonet Pocino is currently employed by the First Claimant and was formerly employed by the Second Claimant. She gave evidence about field testing of the Essenza machines in June 2004 which is also alleged to constitute a prior use. Counsel for Dualit did not criticise her evidence, but he submitted that she was not the right person to give evidence about this subject, and that both in relation to the Venice Convention and the field testing there were other witnesses whom Nestec could have called who would have been in a better position to give evidence than the witnesses they did call. I agree with this. Accordingly, were it necessary to do so, I would be prepared to draw an inference from Nestec's failure to call the appropriate witnesses. In the event, however, I do not consider this necessary.

10. Don Smith formerly of Magimix also gave evidence about the Venice Convention. Unsurprisingly his memory of the event was not very good, but otherwise he was a reliable witness.
11. Mr Gort-Barten is a director of and minority shareholder in Dualit. Mr Gort-Barten gave evidence about a variety of topics, including the sale of Nespresso machines, Nespresso capsules, the market for Nespresso compatible capsules. Although primarily put forward as a witness of fact, he was also designated as an expert. Little criticism was made of his evidence.
12. Dualit also relied upon witnesses statements from Georges Feierabend of Eldom Rothcrist (about the 1,2,3 Spresso, as to which see below) and Tom Brown (who attended the Venice Convention) which were tendered under hearsay notices and thus were not tested in cross-examination.

Background

Portionised coffee machines

13. There are a number of ways to make a cup of coffee. At its simplest, one can pour boiling water over instant coffee granules. At the other end of the scale, a cup of coffee can be produced by a trained barista using a professional espresso machine. In between lie many options from the filter machine to the Cafetière. One approach involves coffee machines that use pre-packaged portions of ground coffee, which are variously referred to as “pods”, “pads” and “capsules”. The intention behind such systems is to offer consumers a way to make a good quality cup of coffee simply and reliably. Thus the major advantage of these systems is convenience.
14. An espresso is brewed by forcing near boiling water under high pressure through finely ground and compacted coffee. This brewing method extracts more of the coffee oils and results in a thicker, stronger brew that is often the base for variants such as a cappuccino or latte. It also produces the characteristic crema, by emulsifying the oils in the ground coffee into a colloid. This does not happen with other brewing methods.
15. Portionised coffee machines can be broadly divided into classes, “hard pod” and “soft pod” machines. “Hard pod” machines are intended to produce coffee which approaches the quality of an espresso, and thus operate at relatively high pressure. Accordingly, the coffee is compacted in the pod, although the pod itself may be made of a soft material such as filter paper. “Soft pod” machines operate at a lower pressure. Accordingly, the coffee is more loosely packed.
16. One of the major determinants of the quality of a cup of coffee is the quality of the coffee itself. Ideally, the beans should be ground only shortly before brewing. For this reason, in a portionised system, some method of protecting the ground coffee prior to extraction should be provided.

The Nespresso System

17. Nestec launched their Nespresso System in Switzerland in 1986 and in the UK in 1996. The System has two basic components: Nespresso machines and Nespresso capsules.

Nespresso capsules

18. There have been four generations of Nespresso capsule, but the external three-dimensional shape of the capsules has varied very little in order to ensure compatibility with older machines. The capsules are made from aluminium and are frustoconical in shape with an annular rim. The current, fourth generation of capsule has a small layer of liquid silicone rubber on the rear side of the annular rim. The front end is sealed with aluminium foil. The coffee inside is therefore protected from exposure to water, oxygen and light. The image below shows a Nespresso capsule seen from the side and rear:



19. Inside the capsule are the coffee grounds and, at the rear end, a non-woven plastic filter that is water permeable and stretchable. The filter promotes even distribution of the water as it enters the capsule through the rear end and prevents used coffee grounds escaping the capsule after piercing.
20. Nespresso capsules were formerly protected by Nestec's European Patent No. 0 512 148 ("EP 148"), which expired in May 2011.

Nespresso machines

21. The first Nespresso machines produced by Nestec were the C100 and C1100, launched in 1986. With these machines, the consumer placed the capsule front down in a "portafilter" – a cup with a handle. The user then inserted the portafilter into the machine and hand-tightened a seal, mimicking the process seen in a professional espresso machine. The process of insertion and tightening caused a hollow needle in the receiving part of the machine to penetrate the rear end of the capsule, which allowed hot water to be injected under pressure. The first generation capsules had an internal filter and the foil on the front had a weakened section that would "pop". In

later generations, the foil on the front would tear against an extraction plate in the base of the portafilter once sufficient pressure had built up, allowing the coffee to exit the capsule from the underside of the portafilter. Once the coffee was brewed, the consumer would loosen the portafilter, remove the spent capsule by hand and dispose of it.

22. The next generation of Nestec machine was the Concept launched in 2001. Here the capsule was placed, front down, on the extraction plate. Using a lever, the consumer then brought the upper part of the brewing chamber down over the rear of the capsule to enclose the capsule. As the brewing chamber was thus formed, the jaws sealed the capsule against the extraction plate. Three blades in the upper part of the brewing chamber penetrated the capsule as the brewing chamber was formed and allowed the hot water to be injected into the capsule from the rear. The foil membrane would break against pyramidal protrusions on the extraction plate when there was sufficient pressure, allowing the coffee to flow out of the capsule. Once the coffee was brewed, the consumer would raise the upper part of the brewing chamber using the lever. As they did so, a lip surrounding the extraction plate would hinge upwards and tip the spent capsule off the extraction plate and backwards into a collection bin.
23. Nestec introduced the Essenza model in 2004. In this machine, the user simply dropped the capsule into an opening in the top of the machine and closed a lever over the opening. The rest of the process, including guiding and positioning the capsule, formation of the brewing chamber and ejection of the spent capsule, was carried out by the internal mechanics of the machine under the control of the lever. Nestec claim that the Essenza and its successors fall within the claims of the Patent, but Dualit dispute this.
24. After 2004 Nestec introduced a number of further machines based on the capsule insertion and extraction method seen in the Essenza. Since 2011 there have been two further designs that incorporate additional features, namely the Pixie and the U. At present there are ten Nestec coffee machines on the market in the UK: the Essenza, Lattissima, Lattissima+, Lattissima premium, Citiz, Citiz+milk, Maestria, Grand Maestria, Pixie and U. In each case, the machines themselves were designed by Nestec, but are manufactured by Eugster and distributed in the UK by Nestec, Krups, Magimix and De'Longhi.

Nespresso brewing units

25. The current Nespresso machines incorporate six different brewing units: the Compact Brewing Unit, the Mini Brewing Unit, the "Tolkien" versions of each of these two, the Nano Brewing Unit and the Motorised Nano Brewing Unit.
26. *Compact Brewing Unit ("CBU")*. This was the first brewing unit and is incorporated in some of the earlier Essenza machines and all Le Cube models. A moulded plastic housing unit has, at the front end, an extraction plate. Behind the extraction plate is a passage in the housing that, at the end nearest the extraction plate, incorporates two capsule insertion guides. The insertion guides are slots formed inside the housing. There are two protrusions which stop the downward path of the capsule in the guide channels by engaging with the annular rim of the capsule. Within the housing, there is a moveable hot water injection assembly with an integrated static capsule cage. At the rear of the closed end of the capsule cage are three blades that penetrate the rear

end of the capsule and allow the hot water to penetrate the capsule. The hot water injection assembly moves in response to the movement of a lever that is connected to a crank.

27. When the capsule is dropped into the passageway, its downward path is arrested by the protrusions and it is held in an intermediate position. As the lever is closed, a crank moves the hot water injection assembly forward. As it does so, the open end of the capsule cage moves over the rear and side wall of the capsule and forces the capsule downwards and forwards beyond the stop means. The annular rim of the capsule deforms slightly to allow it to pass the stop means. The movement of the hot water injection assembly finishes with the capsule cage sealing the capsule against the extraction plate to form the brewing chamber. After extraction of the coffee, when the lever is opened, the hot water injection assembly moves backwards. As it does so, the capsule falls freely into the collection bin below.
28. *Mini Brewing Unit (“MBU”)*. The MBU is a variant of the CBU used in earlier Lattissima machines. The differences are not material for present purposes.
29. *Tolkien variants*. There are “Tolkien” variants of both the CBU and MBU for use with the fourth generation Nespresso capsules (which have a ring of liquid silicone on the rear side of the annular rim). This enabled the rubber seal in the capsule cage of the machine to be dispensed with and resulted in a number of other small changes to the design of the brewing unit. The Tolkien variants are used in the Maestria, Citiz and later Essenza and Lattissima machines.
30. *Nano Brewing Unit (“NBU”)*. The NBU represents the first significant change to the design of the brewing unit and was introduced with the Pixie machine in 2011. In the NBU, the hot water injection assembly is fixed. The consumer moves the operating lever into the vertical position and this causes a mobile housing to extend outward from the body of the machine to reveal a passageway. The front of the mobile housing has the extraction plate and in the walls of the passageway are disposed the guide means and protrusions. The consumer drops the capsule into the slots, and it falls to the protrusions where it is held by the annular rim in the intermediate position. The lever is then moved towards the horizontal position, which moves the mobile housing backwards closing the passageway. As it does so, the rear of the capsule enters the capsule cage and the rim is forced downwards, and forwards beyond the stop means. When the lever is in the horizontal position the brewing chamber is formed, and the capsule rim bears against the extraction plate. In the process the rear of the capsule has been penetrated by the three blades in the capsule cage. After the coffee is extracted, the consumer raises the lever to open the machine and the mobile part moves forwards, away from the hot water injection assembly, leaving the capsule to fall freely into a collection bin.
31. *Motorised Nano Brewing Unit (“MNBU”)*. The MNBU, which is used in the U machine, is simply a motorised version of the NBU and includes a number of other minor differences.

Dualit’s NX Café Caps

32. Dualit’s NX Café Caps are also frustoconical in shape with an annular rim at the front end. They are slightly shorter in length than Nespresso capsules. They are made of

plastic with a foil membrane across the front and are pre-perforated at the rear. Because they are pre-perforated, NX Café Caps are sealed in additional packaging to protect the coffee in them from exposure to oxygen and water prior to use.

The Priority Document

33. The Patent claims priority from European Patent Application No. 03015776 filed on 10 July 2003 which was subsequently published as No. 1 495 702 A1 (“the Priority Document”). The Priority Document is relatively short.
34. It begins at [0001] by stating that the invention “relates to a device for extraction of a capsule, as well as the machine incorporating said device”. It acknowledges that capsule extraction devices already exist ([0002]), but says that the object of the invention is “to provide the consumer with an extraction system that is of simpler design and mechanically reliable” ([0003]).
35. Paragraph [0004] is a consistory clause which states that the invention relates to:
- “a device for the extraction of a capsule comprising
- a fixed part (2),
 - a part (3) which is movable relative to the fixed part with a housing (4) for the capsule and defining, in the closed position, a position for extraction of the capsule in said housing,
 - a part for insertion and positioning (6, 7) of the capsule arranged so as to insert the capsule by gravity and to position said capsule in an intermediate position;
 - a beverage-delivery system,
- in which the movable part displaces the capsule from this intermediate position into the extraction position.”
36. In [0005] the document says that any type of capsule can be extracted using the device according to the invention, including the capsules disclosed in EP 148 (i.e. Nespresso capsules) and European Patent No. 0 603 203 (“EP 203”). It also says that the capsules may contain any type of soluble or extractable food product, including ground coffee.
37. At [0006] the document explains that
- “... the device according to the invention makes it possible to cause the capsule to travel from an intermediate position to an extraction position: it is retained in its intermediate position, it travels into its extraction position and when the second, movable part is opened after extraction, the capsule is released naturally under the simple action of gravity. It falls into a drawer or any other means for collecting the used capsules, and the consumer is ready to reload the device.”

38. In [0007] it says that there are at least two solutions to enable the travel from the intermediate position to the extraction position:
- “The first is that the movable part, when moving, lowers the capsule and pushes it along the axis of said movable part into its extraction position. The second possibility is that the movable part simply pushes the capsule along its axis of displacement into its extraction position.”
39. In [0008] it says that the fixed part comprises a “substantially horizontal guide body for the movement of the movable part”.
40. At [0009] the document states:
- “In the device according to the invention, the part for insertion and positioning of the capsule is arranged in front of, and perpendicular to, the guide body and comprises at least one guide means. Preferably it comprises two guide means. Said means may be of any type, for example in the case of the extraction of a capsule according to patent EP 512 148 said means are insertion slides permitting the engagement of the flange of the capsule.”
41. Three specific embodiments are introduced at [0010], [0011] and [0012] respectively. In the first embodiment, the guide means comprise at least one, and preferably two, stop means to retain the capsule in the intermediate position. The stop means may be of any type, for example stop projections of a height just sufficient to immobilise the capsule. This embodiment appears to reflect the first solution referred to in [0007]. In the second embodiment, the guide means are pivotable and arranged to immobilise the capsule when the movable part is in the open position and to release the capsule when the movable part is in the closed position. In the third embodiment, a retractable stop is arranged under the movable part in front of the guide body which holds the capsule in position when the movable part is in the open position. The second and third embodiments appear to reflect the second solution.
42. In [0013] the document says that the device further comprises an extraction plate towards which the movable part displaces the capsule into the extraction position. If the capsule is in accordance with the earlier Nestec patents, the plate comprises pyramids or spikes as described therein.
43. The first embodiment is described in more detail in [0016] and [0020]-[0021] by reference to Figures 1-6. As the document explains at [0016]:
- “... the consumer inserts a capsule via the insertion slide. The stop means immobilise the capsule in the intermediate position. The consumer acts on the means permitting the closure of the movable part, so that the movable part takes the capsule into its housing and lowers the axis of the capsule to bring it onto the axis of displacement of the movable body, which has the result that the flange of the capsule travels over the stop means and is positioned in the extraction position below said stop means.

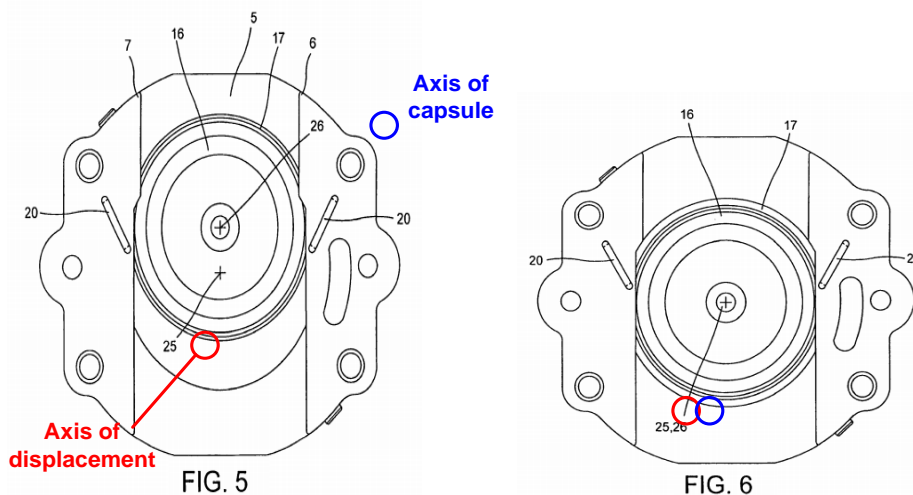
The extraction takes place, and when the movable part is opened the capsule falls by gravity, because it is no longer retained by the stop means.”

44. The stop means are described in more detail in [0021]-[0022] by reference to Figures 5 (which shows the capsule in the intermediate position) and 6 (which shows the capsule in the extraction position):

“[0020] ... The device according to the invention ... comprises, in the guide means (6,7), two identical stop means (20) permitting the capsule to be maintained in the intermediate position. ...

[0021] The device according to the invention works operates in the following manner: the consumer inserts the capsule (16) via the insertion slides (6,7). The capsule slides until it reaches the stop means (20); the flange of the capsule bears against said stop means and the capsule is in the intermediate position, as is also seen clearly in Figure 5; the axis of the capsule is indicated by reference numeral (26) and the axis of the movable body by reference numeral (25). The consumer then acts on the lever (9), which displaces the movable body (3) ... Said movable body is displaced along its axis (25); during this movement it causes the capsule (16) to enter its housing (4), which has the result of lowering the axis (25) of the movable body. The consequence is that the flange of the capsule passes below the stop means (20). ...”

45. For convenience, I reproduce Figures 5 and 6 from the Patent (which only differ from the corresponding figures of the Priority Document in that the identifying numerals are typeset rather than written in manuscript) marked up to show the two axes referred to in the description:



46. It is common ground that the skilled person would recognise the concentric circles in Figures 5 and 6 as depicting a Nespresso capsule.

47. There is a dispute as to how the skilled person would understand the stop means 20 depicted in these figures, which it is convenient to address here. Mr Nicholson pointed out that, as drawn, they appear to consist of protrusions coming out of the page i.e. away from the guide means 6, 7. But, as he acknowledged, if that were the case, the protrusions would not function as stop means. In my judgment the skilled person would draw the conclusion that, in this respect, Figures 5 and 6 were badly drawn, and that what was intended was protrusions extending into the page i.e. into the guide means 6, 7.
48. The second embodiment is described in more detail at paragraphs [0022]-[0024] by reference to Figures 7-10. The third embodiment is described in more detail at paragraphs [0025]-[0027] by reference to Figures 11-13.
49. In all three embodiments, the capsule is depicted as being held vertically in the intermediate position, with its axis being either parallel to the axis of the capsule in the extraction position (first embodiment) or coaxial with that axis (second and third embodiments). Furthermore, in all three embodiments the housing for the capsule is located in the movable part.
50. Claim 1 of the Priority Document is to a device in accordance with the consistory clause. Claims 2 to 10 each relate to specific features of components of the device (i.e. the fixed part, the guiding means etc.). Claim 11 is to a device according to any preceding claim integrated in a coffee machine.

The Patent

51. There are considerable differences between the Patent and the Priority Document. Rather than attempt to list the differences, it is simpler to describe the disclosure of the Patent afresh even though this inevitably means some repetition.
52. The specification begins at [0001] by saying that the invention relates a system comprising a capsule extraction device. It goes on at [0002] to acknowledge that capsule extraction devices exist, but says that there is a need for an extraction device which facilitates the insertion and the positioning of the capsule in the device, but which is both simple and inexpensive.
53. In [0003] the specification states:

“One problem encountered is the positioning of the capsule in the device and the closure thereof around the capsule to carry out the extraction. The capsule generally has to be positioned by the user on a capsule support or in a housing, then the device is closed again manually or automatically around the capsule. It is important to position the capsule correctly so that the device is correctly closed again around said capsule and so that a good seal is thus made to ensure good extraction conditions. Poor positioning may damage the capsule and thus affect the extraction conditions. The loading of the capsule also has to be easy, without trial and error regarding the correct position of the capsule in the device. The loading also has to be as rapid as possible and not require excessive handling.”

54. In [0004] the specification refers to a number of a number of prior devices, including that disclosed in United States Patent No. 5,766,527 (“Blanc”), all of which are said to be complex and/or expensive to produce.

55. The objects of the invention are set out in [0005] as follows:

“The aim of the present invention is to provide the consumer with an extraction system which is of simpler design, less costly and mechanically reliable. One of the subjects of the invention is to facilitate the insertion of a capsule into a device for the extraction of said capsule; in particular to permit the insertion and the positioning of a capsule in an extraction device without trial and error or excessive handling and without the risk of incorrectly positioning the capsule in said device. A further object is to limit the number of necessary components, in particular the number of movable components of the device so as to reduce its complexity and its production cost.”

56. At [0007] the specification says that any type of capsule can be extracted using the device according to the invention, including the capsules disclosed in EP 148 and EP 203. It goes on:

“In a preferred embodiment, the capsule is asymmetrical and comprises a guide edge which is received by the guide means of the device. Thus a capsule which is asymmetrical along a guide edge makes it possible to cause the capsule to tilt slightly relative to the extraction axis. Such tilting has the advantage of making it possible to act on the capsule when it is repositioned on the axis of extraction as will be explained below. However, the device according to the invention may also operate using symmetrical capsules.”

57. In [0008] the specification says that the capsules may contain any type of soluble or extractable food product, including ground coffee.

58. The specification then states:

“[0009] More specifically, the device according to the invention makes it possible to cause the capsule to travel from an intermediate position to an extraction position: it is retained in its intermediate position, it travels into its extraction position and when the second, movable part is opened after extraction, the capsule is released naturally under the simple action of gravity. It falls into a drawer or any other means for collecting the used capsules, and the consumer is ready to reload the device.

[0010] The device comprises means for stopping the capsule. Said stop means are configured to retain the capsule in the intermediate position when the capsule is inserted into the insertion-and-positioning part. Said stop means retain the capsule on an axis which is offset or inclined relative to the

axis of the capsule in the extraction position in the housing. The extraction position corresponds to the position in which the movable part is closed against the fixed part, enclosing the capsule.

[0011] It is noteworthy that the housing may be formed in the movable part or the fixed part or even divided between the fixed part and the movable part.”

59. At [0012] it says that there are at least two solutions to enable the travel from the intermediate position to the extraction position.

60. The first solution is described as follows:

“[0013] A first solution consists in maintaining the capsule in the intermediate position in an offset manner relative to the axis of the capsule in the extraction position, for example, so that the movable part acts on the capsule when moving to lower it and push it along the axis of said movable part into its extraction position. The capsule may be offset with respect to its recentring axis (or extraction axis), for example parallel thereto, or be inclined relative to its recentring axis at a specific angle, preferably a small angle of less than 30 degrees. Such a solution makes it possible to avoid any mechanical complexity and uses a minimum number of movable components. More specifically, the capsule may be simply maintained in the intermediate position by static stop means and it is the movable part which displaces the capsule when it is displaced towards the fixed part and thus positions it in the extraction position.

[0014] In a first preferred embodiment, the movable part is thus configured to force the capsule to travel beyond the stop means when the capsule travels from its intermediate position to its extraction position. Thus, when the movable part drives the capsule, said capsule being positioned on an offset or inclined axis, the capsule is forcibly repositioned in the axis of displacement of the movable part corresponding to the axis of the capsule in the extraction position, which forces the capsule to travel beyond the stop means. Once the capsule has travelled past the stop means, said capsule is put in the extraction position by at least one of the parts closing against the other and pressing the capsule against the extraction part. Once the two parts have reopened, the capsule is no longer held by the stop means and is thus able to be released. It is understood that such a configuration provides greater simplicity and reliability relative to the known systems.”

61. The second solution is described in [0015]. In this solution, the movable part simply pushes the capsule along its axis of displacement into the extraction position.

62. In [0016] the specification says that the fixed part comprises a “substantially horizontal guide body for the movement of the movable part”.

63. At [0017] the specification states:

“In the device according to the invention, the part for insertion and positioning of the capsule is arranged in front of, and perpendicular to, the guide body and comprises at least one guide means. Preferably it comprises two guide means. Said means may be of any type, for example in the case of the extraction of a capsule according to patent EP 512 148 said means are insertion slides permitting the engagement of the flange of the capsule.”

64. Three specific embodiments are introduced at [0018], [0019] and [0020] respectively. In the first embodiment, the guide means comprise at least one, and preferably two, stop means to retain the capsule in the intermediate position. The stop means may be of any type, for example stop projections of a height just sufficient to immobilise the capsule. The specification adds:

“The projections cooperate with an edge of the capsule, such as a flange, for example, the projections thus retain the capsule by the flange bearing against said projections. The passage from the bearing position to the release position may be made by forcing the flange to travel beyond the projections; said projections being able to be fixed or resiliently retractable.”

This embodiment appears to reflect the first solution referred to in [0013].

65. In the second embodiment, the guide means are pivotable and arranged to immobilise the capsule when the movable part is in the open position and to release the capsule when the movable part is in the closed position. In the third embodiment a retractable stop is arranged under the movable part in front of the guide body which holds the capsule in position when the movable part is in the open position. The second and third embodiments appear to reflect the second solution.

66. In [0021] the specification says that the device further comprises an extraction plate towards which the movable part displaces the capsule into the extraction position. If the capsule is in accordance with the earlier Nestec patents, the plate comprises pyramids or spikes as described therein.

67. The first embodiment is described in more detail in [0024] and [0029]-[0031] by reference to Figures 1-6, stating in particular:

“[0029] ... The part for inserting and positioning the capsule 16 comprises two guide means 6, 7 in which the capsule slides for the positioning thereof. The capsule may thus be provided with a flange which slides through the guide means. The capsule is retained in an offset position relative to the axis 25 of displacement of the movable part.

[0030] As the capsule is asymmetrical relative to its flange, the capsule is also slightly inclined because its centre of gravity is offset relative to the flange. This offset assists with the reception of the capsule by the housing of the movable part when it is displaced. ... The device according to the invention finally comprises, in the guide means 6, 7, two identical stop means 20 permitting the capsule to be maintained in the intermediate position....

[0031] The system according to the invention operates in the following manner: the consumer inserts the capsule 16 via the insertion slides 6, 7. The capsule slides until it reaches the stop means 20; the flange of the capsule bears against said means and the capsule is in the intermediate position, as is also seen clearly in Figure 5; the axis of the capsule is indicated by reference numeral 26 and the axis of the movable body by reference numeral 25. As the capsule is asymmetrical relative to the plane passing through its flange, the axis of the capsule has the tendency to be slightly inclined relative to the axis of displacement of the movable part. The consumer then acts on the lever 9, which displaces the movable body 3 via the connecting-rod system. Said movable body is displaced along its axis 25; during this movement it causes the capsule 16 to enter its housing 4, which has the result of lowering the axis 26 of the capsule towards the axis 25 of the movable body. The consequence is that the flange of the capsule passes below the stop means 20....”

68. The second embodiment is described in more detail at paragraphs [0032]- [0033] by reference to Figures 7-10. The third embodiment is described in more detail at paragraphs [0034]-[0035] by reference to Figures 11-13.

The claims as granted

69. Claim 1 of the Patent as granted may be broken down into convenient integers as follows:
- [1A] Extraction system comprising a device for the extraction of a capsule and a capsule (16) that can be extracted in the device;
 - [1B] the capsule (16) comprising a guide edge in the form of a flange,
the device comprising
 - [1C] - a first fixed part (2),
 - [1D] - a second part (3) which is moveable relative to the first part,
 - [1E] - a housing (4) to receive the capsule and defining, in the closed position of the moveable part against the fixed part, a position for extracting the capsule on an axis (25) in said housing,

- [1F] - a part for insertion and positioning comprising guide means (6,7) for the capsule arranged so as to insert the capsule by gravity and position said capsule in an intermediate position;
- [1G] the guiding edge being received in the guide means (6,7);
- [1H] said guide means being insertion slides permitting the engagement of said flange;
- [1I] - a beverage-delivery system (19, 53),
- [1J] said second moveable part (3) being configured to displace the capsule (16) from the intermediate position to the extraction position when the device is closed,

characterised in that

- [1K] the guide means (6, 7) comprise stop means (20) configured to retain the capsule (16) in an intermediate position;
- [1L] the flange bearing against said stop means in the intermediate position,

and in that

- [1M] the second, moveable part (3) receives the capsule to displace it from the intermediate position to the extraction position on the axis (25) of the capsule in the extraction position in said housing (4)
- [1N] so that, when moved, the moveable part acts on the capsule to move it downwards,
- [1O] the flange of the capsule passing below the stop means (20),
- [1P] and to push it along the axis (25) of said moveable part into its extraction position.

70. The relevant subsidiary claims, again broken down into convenient integers, are as follows:

Claim 2

2A Extraction system according to claim 1,

characterised in that

2B the capsule is frustoconical.

Claim 5

5A Extraction system according to claims 1, 2, or 3,

characterised in that

- 5B the stop means retain the capsule in an inclined manner relative to the axis (25) of the capsule in the extraction position in said housing;
- 5C the capsule tilting slightly relative to the axis of the capsule in the extraction position (25).

Claim 6

- 6A Extraction system according to any one of the preceding claims,
characterised in that
- 6B the stop means retain the capsule in an inclined manner at a small angle of less than 30 degrees relative to the recentring axis (25).

Claim 7

- 7A System according to any one of the preceding claims,
characterised in that
- 7B the capsule is asymmetrical relative to the plane passing through the flange so as to be able to be inclined because its centre of gravity is offset relative to the flange.

Claim 8

- 8A Extraction system according to claim 7,
characterised in that
- 8B the second, moveable part (3) is configured to force the flange of the capsule (16) to pass below the stop means (20), in particular the projections, during the passage of the capsule from its intermediate position to its extraction position.

Claim 1 as proposed to be amended

71. Claim 1 as conditionally proposed to be amended is as follows:
- [1A] Extraction system comprising a device for the extraction of a capsule and a capsule (16) that can be extracted in the device;
- [1B] the capsule (16) comprising a guide edge in the form of a flange,
the device comprising
- [1C] - a first fixed part (2),
- [1D] - a second part (3) which is moveable relative to the first part,

- [1E] [-] comprising a housing (4) to receive the capsule and defining, in the closed position of the moveable part against the fixed part, a position for extracting the capsule on an axis (25) in said housing,
- [1F] - a part for insertion and positioning comprising guide means (6,7) for the capsule arranged so as to insert the capsule by gravity and position said capsule in an intermediate position;
- [1G] the guiding edge being received in the guide means (6,7);
- [1H] said guide means being insertion slides permitting the engagement of said flange;
- [1I] - a beverage-delivery system (19, 53),
- [1J] said second moveable part (3) being configured to displace the capsule (16) from the intermediate position to the extraction position when the device is closed,

characterised in that

- [1K] the guide means (6, 7) comprise stop means (20) configured to retain the capsule (16) in an intermediate position, in a manner which is offset to the axis of the capsule in the extraction position;
- [1L] the flange bearing against said stop means in the intermediate position,
- and in that**
- [1M] the second, moveable part (3) receives the capsule to displace it from the intermediate position to the extraction position on the axis (25) of the capsule in the extraction position in said housing (4)
- [1N] so that, when moved, the moveable part acts on the capsule to move it downwards,
- [1O] the flange of the capsule passing below the stop means (20),
- [1P] and to push it along the axis (25) of said moveable part into its extraction position.

The skilled person

72. A patent specification is addressed to those likely to have a practical interest in the subject matter of the invention, and such persons are those with practical knowledge and experience of the kind of work in which the invention is intended to be used. The addressee comes to a reading of the specification with the common general knowledge of persons skilled in the relevant art, and he (or she) reads it knowing that its purpose is to describe and demarcate an invention. He is unimaginative and has no inventive capacity.

73. In the present case there is little or no dispute as to the identity and attributes of the skilled person. The skilled person would have a degree in engineering or design engineering and at least five years' practical experience in designing small kitchen appliances, and in particular beverage machines. Since the invention is of particular application in the field of coffee machines, the skilled person would be likely to have some experience in that field.

Common general knowledge

74. I reviewed the law as to common general knowledge in *KCI Licensing Inc v Smith & Nephew plc* [2010] EWHC 1487 (Pat), [2010] FSR 31 at [105]-[115]. That statement of the law was approved by the Court of Appeal [2010] EWCA Civ 1260, [2011] FSR 8 at [6].
75. In the present case there is little dispute as to the skilled person's common general knowledge. It is common ground that the early Nespresso machines and the Nespresso capsules were part of the common general knowledge, as were four other portionised coffee systems that were on the market prior to June 2003, namely Philips Senseo, Illy ESE, Lavazza Point and Keurig K-Cup.
76. The Philips Senseo was a soft pod system. The coffee pods were made of filter paper with a flange on one face. The user would place the coffee pod on a holder and then place the holder horizontally on the Senseo machine. The user then closed the lid over the top of the pod and the pod holder to form the brewing chamber. The Senseo operated at low pressure. After brewing was completed, the user opened the device, removed the holder and tipped the spent pod into the bin.
77. The Illy ESE was a hard pod system. The pods were made of filter paper with a flange on one face. The user placed the pod into a portafilter-type handle and inserted this into the Illy ESE machine to form the brewing chamber. The Illy ESE operated at high pressure. After brewing was completed, the user would loosen the handle and extract the spent pad by hand.
78. The Lavazza Point system used a plastic cartridge, roughly cylindrical in shape and with an annular rim. It was inserted horizontally into the device and pushed laterally into position. Closing the outer door to the insertion point forced the cartridge into the brewing position. After brewing was completed, the spent cartridge was pushed out of place by the insertion of the next cartridge or by the use of a special "key".
79. The Keurig K-Cup system used frustoconical plastic cartridges. The user would take the cartridge and insert it by dropping it upright into a receiving cavity in the machine. The user then lowered a lid over the top of the cartridge to form the brewing chamber. When brewing was completed, the user would open the lid and remove the spent cartridge by hand.
80. The principal dispute is as to the extent of the skilled person's common general knowledge regarding a coffee machine known as the 1,2,3 Spresso. Nestec contend that the skilled person would have been aware of the existence of the 1,2,3 Spresso and that it enabled a coffee pod to be dropped into a slot in the top of the machine under gravity, but not of the details of its internal construction (as to which, see below). Dualit contend that the skilled person would also have been aware of the

details of its internal construction. Since I cannot see that it matters who is right about this, I shall simply state my conclusion, which is that having considered the evidence I am not persuaded that the skilled person's common general knowledge would have extended to the details of the machine's internal construction.

Construction

81. The general principles applicable to the construction of patent claims were summarised by Jacob LJ in *Virgin Atlantic Airways Ltd v Premium Aircraft Interiors UK Ltd* [2009] EWCA Civ 1062, [2010] RPC 8 at [5].

Against

82. Integer 1E of claim 1 requires a housing which defines a position for extracting the capsule "in the closed position of the movable part against the fixed part". There is an issue as to what is meant by "against" here. Dualit contend that the skilled person would understand that the movable part and the fixed part must be in direct contact with each other, and thus that the claim excludes arrangements in which the movable part is separated from the fixed part by the flange of the capsule (as in the case of the Nespresso machines in issue). Nestec dispute that the skilled person would understand that the patentee had intended to exclude such arrangements.
83. In my judgment Nestec are correct on this point. As a matter of ordinary English, a reference to an object being held "against" another does not necessarily mean that it has to be in direct contact. Thus the word is wide enough to embrace such arrangements without strain. In any event, what matters is the skilled person's understanding of the purpose of this requirement. It is common ground that the skilled person would appreciate that the purpose of closing the movable part "against" the fixed part is to define a position for extracting brewed coffee from the capsule and that, as the specification states at [0003], it is important that a good seal is made to ensure good extraction conditions. Nowhere in the specification is it suggested, however, that the seal must be made by direct contact between the movable part and the fixed part. Furthermore, the skilled person would be aware from his common general knowledge that it is standard engineering practice to use an intermediate component (such as a gasket, O-ring or washer) to effect proper sealing between two surfaces. Accordingly, the skilled person would understand that it was entirely consistent with the purpose of closing the movable part against the fixed part for the two to be separated by such a component, and that the flange of the capsule could perform that role.

Guide means being insertion slides

84. Integer 1F of claim 1 requires the presence of "guide means" for the capsule arranged so as to enable the capsule to be inserted and positioned in an intermediate position by gravity. Integer 1G requires that the guide means receive the guiding edge (i.e. flange) of the capsule. Integer 1H requires the guide means are insertion slides permitting the engagement of the flange. Integer 1K requires that the guide means comprise stop means.
85. There is a dispute as to how far these requirements extend. Nestec contend that the guide means must control the movement of the capsule from insertion to the point

where it rests in the intermediate position by engaging the capsule rim in insertion slides. Accordingly, Nestec contend that the claim does not cover an arrangement (as in Blanc) in which (a) the insertion of the capsule is guided by insertion slides which engage the flange of the capsule and (b) the capsule is retained in the intermediate position by insertion slides comprising stop means, but (c) there are no guide means to control the travel of the capsule from (a) to (b). Dualit contend that the claim extends to such an arrangement.

86. In my judgment Dualit are correct on this point. The wording “guide means” is very broad and the specification states at [0017] that the guide means may be of any type. It is true that integer 1H limits the guide means to insertion slides which engage the flange, but there is nothing in the claim to restrict the guide means to insertion slides of unitary construction which extend all the way from the point of insertion to the intermediate position. The wording is broad enough to encompass two sets of insertion slides, one at the point of insertion and one at the intermediate position, with the capsule dropping from one to the other under gravity. Furthermore, the skilled person would appreciate that the purpose of the insertion slides is first to guide the capsule while being inserted and secondly to guide the capsule when it reaches the stop means. While the skilled person would appreciate that it would be preferable for the travel of the capsule to be controlled throughout its descent, there is nothing in the specification to suggest to the skilled reader that that is a requirement of the invention. Nor is there anything else to suggest that the patentee intended to exclude arrangements in which the travel of the capsule is not controlled throughout its descent.

Receives and acts to move downwards

87. Integers 1M, 1N and 1P of claim 1 require that the movable part receives the capsule to displace it from the intermediate position to the extraction position in the housing so that, when moved, the movable part acts on the capsule to move it downwards and push it along the axis into the extraction position.
88. Again there is a dispute as to how far these requirements extend. Dualit contend that they do not encompass an arrangement in which the housing is located in the fixed part and the extraction plate pushes the capsule into the housing (as in the U and Pixie machines), since the movable part (i.e. the extraction plate) does not receive the capsule and does not act on the capsule to move it downwards. Nestec contend that the claim does encompass such an arrangement. Nestec say that “receives” is not restricted to “envelops”, but extends to “engages”. As for “acts on the capsule to move it downwards”, Nestec say that this extends to downward movement of the capsule as a result of interaction between the capsule (at least when the capsule is frustoconical) and the housing.
89. In my judgment Dualit are correct on this point. The skilled person would understand from the wording of the claim read in the context of the specification that the way in which the invention works is that the movable part receives the capsule and moves it both downwards and along from the intermediate position to the extraction position. Even if the skilled person understood “receives” in the sense of “engages”, which I have some doubt about, I do not think that the skilled person would understand the claims as extending to arrangements in which the movable part exerts no downward force on the capsule.

Priority

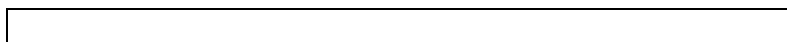
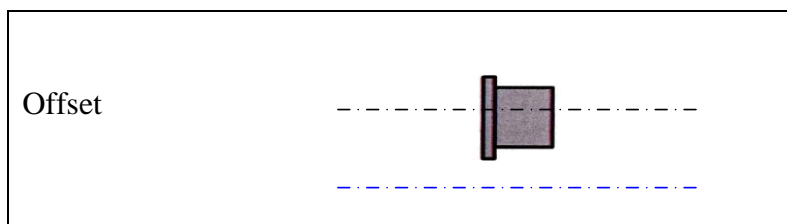
The law

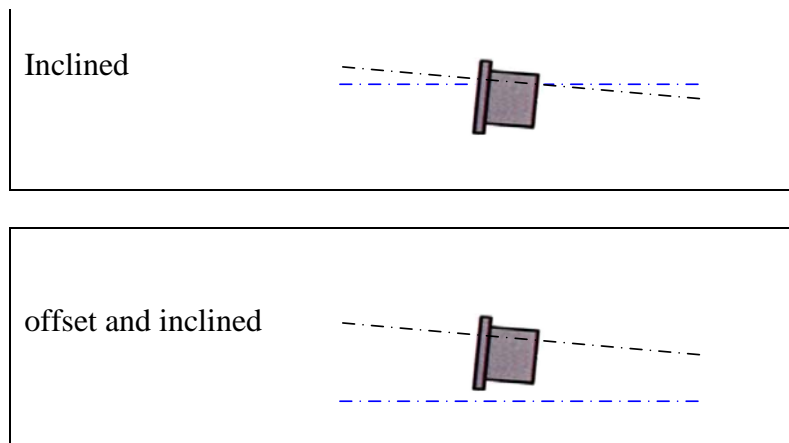
90. In order for a claimed invention to be entitled to priority from an earlier application, it must, in the words of section 5(2)(a) of the Patents Act 1977, be “supported by matter disclosed” in that earlier application. Article 87(1) of the European Patent Convention expresses the requirement as being that priority can only be accorded in respect of “the same invention” as one in the earlier application. Section 5 is one of the sections which is declared to be intended to have the same effect as the corresponding provision of the EPC: see section 130(7).
91. In case G2/98 [2001] OJEPO 413, [2002] EPOR 167 the Enlarged Board of Appeal of the European Patent Office equated “the same invention” in Article 87(1) with “the same subject-matter” in Article 87(4). It expressed the requirement for claiming priority as follows:
- “The requirement for claiming priority of ‘the same invention’, referred to in Article 87(1) EPC, means that priority of a previous application in respect of a claim in a European patent application in accordance with Article 88 EPC is to be acknowledged only if the skilled person can derive the subject-matter of the claim directly and unambiguously, using common general knowledge, from the previous application as a whole.”
92. The Court of Appeal explained this requirement in *Unilin Beheer NV v Berry Floor NV* [2004] EWCA Civ 1021, [2005] FSR 6 at [48] as follows:
- “The approach is not formulaic: priority is a question about technical disclosure, explicit or implicit. Is there enough in the priority document to give the skilled man essentially the same information as forms the subject-matter of the claim and enables him to work the invention in accordance with that claim?”
93. As Kitchin J (as he then was) observed in *Abbott Laboratories Ltd v Evysio Medical Devices plc* [2008] EWHC 800 (Pat), [2008] RPC 23 at [228], after citing G2/98 and *Unilin v Berry*:
- “So the important thing is not the consistency clause or the claims of the priority document but whether the disclosure as a whole is enabling and effectively gives the skilled person what is in the claim whose priority is in question. I would add that it must ‘give’ it directly and unambiguously. It is not sufficient that it may be an obvious development of what is disclosed.”
94. In the present case, there is an issue as to partial priority. This was explained by Kitchin J in *Novartis AG v Johnson & Johnson Medical Ltd* [2009] EWHC 1671 (Pat) at [122] as follows, having cited a passage from G2/98:

“I discern from this passage that the EPO considers it is permissible to afford different priority dates to different parts of a patent claim where those parts represent a limited number of clearly defined alternative subject-matters and those alternative subject-matters have been disclosed (and are enabled) by different priority documents. Further, this principle applies even if the claim has adopted a generic term to describe and encompass those alternatives. I do not detect anything in the decisions of the Court of Appeal in *Pharmacia* and *Unilin Beheer* which is inconsistent with this approach and in my judgment is one which this court should adopt.”

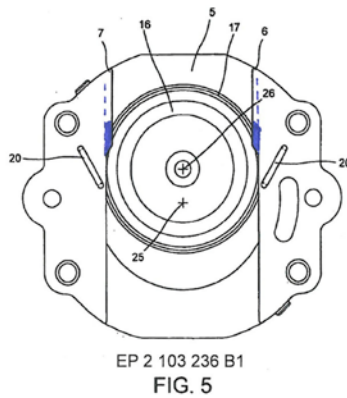
Assessment

95. Dualit dispute that the claims of the Patent are entitled to priority from the Priority Document for two distinct reasons.
96. *The housing.* It is common ground that claim 1 of the Patent covers arrangements in which the housing to receive the capsule (integer 1E) is contained in either (i) the movable second part (integer 1D) or (ii) the fixed first part (integer 1C) or (iii) divided between the movable part and the fixed part, as disclosed at [0011] of the Patent. It is also common ground that only the first of these arrangements is disclosed in the Priority Document. The dispute is as to the consequences of this. Dualit contend that it follows that claim 1 is not entitled to priority. Nestec contend that claim 1 is entitled to partial priority: it has priority with regard to option (i), but not options (ii) and (iii). Who is right depends on whether these three arrangements are clearly defined alternatives. In my judgment option (ii) is a clearly defined alternative to option (i), but the same cannot be said of option (iii). Option (iii) is not actually a single arrangement at all. It covers a whole range of different arrangements – everything that is not covered by options (i) or (ii). Furthermore, some of the arrangements covered by option (iii) (housing mainly in the movable part) would be quite similar to option (i) and others (housing mainly in the fixed part) would be quite similar to option (ii). Thus option (iii) is not a clearly defined alternative to options (i) and (ii).
97. *Inclined capsules.* Nestec contend that the Patent discloses in [0010], [0013]-[0014] and [0029]-[0030], and claim 1 covers, three different orientations of the capsule in the intermediate position relative to the extraction axis as shown below (the axis of the capsule being shown by the upper dotted black lines and the extraction axis being shown by the lower dotted blue lines):





98. Dualit dispute that the Patent discloses or claims arrangements in which the capsule is both offset and inclined, but this dispute does not appear to matter because Dualit accept that it does disclose and claim both the second and the third arrangements shown above (on Dualit’s interpretation, they are both covered by the word “inclined”).
99. It is common ground that the Priority Document discloses the first arrangement. I do not understand it to be in dispute that the Priority document does not disclose the second arrangement, but in any event I consider that that much is clear. The issue is whether it discloses the third arrangement. It is common ground that the Priority Document does not expressly disclose such an arrangement. Dualit contends that it follows that claim 1 is not entitled to priority. Nestec contends that such an arrangement is implicitly disclosed, in particular by Figure 5.
100. Nestec say that the skilled person looking at Figures 5 and 6 would appreciate that (a) the insertion slides constituting the guide means would have to be slightly wider than the flange of the capsule and (b) given that the capsule is an asymmetric frustoconical capsule whose centre-of-gravity lies behind the flange, the capsule would tilt slightly when immobilised on the stop means. Nestec accept, however, that the Priority Document does not disclose an angle of inclination of 30 degrees. Accordingly, Nestec accept that claim 6 as granted is not entitled to priority and propose to delete it by amendment.
101. Dualit dispute this. In particular, Dualit say that, if the skilled person considered the matter at all, he would notice that the insertion slides shown in Figures 5 have narrowed portions (coloured blue in the copy below) above the level of the stops, which would tend to restrain any tilting:



102. In my judgment the Priority Document does not disclose that the capsule is inclined. As is agreed, there is no mention of this in the text. In both Figures 5 and 6, the capsule is clearly shown as being in the vertical position. While I accept that the skilled person would, if he thought about it, realise that there would have to be some tolerance between the insertion slides and the flange and that that would probably cause the capsule to tilt slightly when resting on the stops, there is nothing to suggest to him that that would be inevitable, let alone intentional or advantageous. On the contrary, he would think that the insertion slides had been designed to minimise any such tilting. Accordingly, he would conclude that this was something that could be ignored for the purposes of the invention. This is particularly so given that the skilled person would appreciate that Figures 5 and 6 illustrate a specific embodiment in which the capsule is an asymmetric frustoconical capsule, but that the specification is explicit that any type of capsule with a flange may be employed in the invention.
103. Counsel for Nestec submitted that, even if that was so, the only consequence was that claim 5 was not entitled to priority. He argued that claim 1 would still be entitled to priority, since although claim 1 covered arrangements in which the stop means retained the capsule in an inclined manner relative to the axis of the capsule in the extraction position, they were not disclosed by claim 1. I do not accept this argument. Such arrangements are expressly disclosed in the specification, and the skilled reader would appreciate that claim 1 included them. Thus the invention of claim 1 is not entitled to priority for such arrangements. Counsel for Nestec did not argue that claim 1 was entitled to partial priority in these circumstances. In any event, I do not consider that such arrangements are clearly defined alternatives to the other arrangements covered by claim 1.
104. *Conclusion.* Accordingly, I conclude that claim 1 is not entitled to priority from the Priority Document for both these reasons. As I understand it, it is common ground that it follows that none of the other claims are entitled to priority either.

Added matter

105. The law with regard to added matter was explained by Jacob LJ in *Vector Corp v Glatt Air Techniques Ltd* [2007] EWCA Civ 805, [2008] RPC 10 at [4]-[9]. As he held in *Napp Pharmaceutical Holdings Ltd v Ratiopharm GmbH* [2009] RPC 18 at [98]-[99], a claim does not add subject matter merely because it is wide enough to cover that subject matter.

106. Dualit contend that the Patent is invalid on this ground for the following reason. Claim 1 of the application required guide means with stop means configured to retain the capsule in an intermediate position “on an axis in an offset and/or inclined manner relative to the axis of the capsule in the extraction position in the housing”. Those words do not appear in integer 1K of claim 1 of the Patent as granted. Dualit contend that, as a result, the Patent discloses arrangements in which the capsule is held in an intermediate position in which the capsule is coaxially displaced from its position in the extraction position.
107. Nestec dispute this contention for two reasons. First, Nestec point out that, although the words referred to above were removed from claim 1 of the application, integers 1N-1P of claim 1 were added. This aspect of the claim reflects paragraphs [0010] and [0013] of the Patent as granted. The same passages were contained in the application. Nestec argue that, once these integers are taken into account, a coaxial arrangement is excluded.
108. Dualit riposte that the claim does not exclude an arrangement in which the capsule is held in the intermediate position on an axis that is coaxial with the extraction axis, then forced down to an axis below the extraction axis, moved below the stop means and then raised to the axis of extraction again.
109. That argument leads on to Nestec’s second reason, which is that such an arrangement may be covered by claim 1 as granted, but it is simply not disclosed anywhere in the Patent. I agree with this. Accordingly, the Patent is not invalid on this ground.

Lack of novelty

The law

110. As was explained by the House of Lords in *Synthon BV v SmithKline Beecham plc* [2005] UKHL 59, [2006] RPC 10, in order for an item of prior art to deprive a patent claim of novelty, two requirements must be satisfied. First, the prior art must disclose subject matter which, if performed, would necessarily infringe that claim. Secondly, the prior art must disclose that subject matter sufficiently to enable the skilled addressee to perform it. The test for enablement in this context is essentially the same as the test for enablement in the context of insufficiency: see Lord Hoffmann at [27].

Novelty of claims 1, 2, 7 and 8 over the Priority Document

111. In the event that claims 1, 2, 7 and 8 are not entitled to priority, as I have held, Dualit contend that they lack novelty over the Priority Document. There is no dispute that in those circumstances the Priority Document is prior art pursuant to section 2(3) of the Patents Act 1977 corresponding to Article 54(3) EPC. Nestec contends that the claims cannot simultaneously lack priority from, and be anticipated by, the Priority Document. Counsel for Nestec did not dispute, however, that in principle such a result was legally possible. Nor did he dispute that the Priority Document disclosed arrangements having all the features of the relevant claims. Rather, he argued that it followed that the claims were entitled to priority. As counsel for Dualit pointed out, however, the claims are broader than the disclosure of the Priority Document. Thus they can, and in my judgment do, lack novelty over the disclosure of the Priority Document even though they are not entitled to priority from it.

Novelty over the Venice Convention and the Field Tests

112. In the event that none of the claims is entitled to priority, as I have held, Dualit contend that they all lack novelty over the use of Essenza machines at the Venice Convention and in the Field Tests. This contention assumes that the Essenza falls within the claims of the Patent, contrary to Dualit's contention. For this purpose I shall assume that the Essenza does fall within the claims. On that basis, the sole issue is whether the design of the capsule insertion and extraction mechanism of the Essenza machines was made available to the public by either the Venice Convention or the Field Tests. Counsel for Dualit accepted in his closing submissions that Dualit could not succeed on the Venice Convention if it failed on the Field Tests, so I will concentrate on the latter.
113. *Field Tests.* By the end of the trial, the following facts were not in dispute:
- i) 40 test series Essenza machines were provided to end consumers in Belgium and Switzerland for testing in the week of 7 June 2004. The consumers had the machines in their possession until 15 December 2004. At the end of that period, all the machines were collected from the customers (apart from a few that were returned early due to failure). The object of the exercise was to gain consumer feedback with regard to the machines, in particular as to any failures or breakdowns.
 - ii) There was no relevant difference between the test series Essenza machines supplied to the consumers for the Field Tests and later production Essenza machines.
 - iii) The machines were intended to be used by the consumers in accordance with normal usage i.e. to make coffee.
 - iv) There was nothing to prevent the consumers from inspecting the machines in their assembled state as thoroughly as they wished. In particular, the consumers would have been able to shine a torch into the hole under the lever and to put their fingers inside the hole to feel what was there.
 - v) The machines were supplied with so-called "tamper proof" screws. These "tamper proof" screws were screws with smooth oval heads. They were "tamper proof" in the sense that they could not be undone, in order to disassemble the machines, using an ordinary screw driver. They could be undone, however, using a screw driver with a hexagonal socket head of a kind which was widely available in hardware stores. Furthermore, a skilled person equipped with such a tool would have been able to disassemble and re-assemble a machine without damaging it. By disassembling a machine, a skilled person could discover precisely how the capsule insertion and extraction mechanism worked.
114. Nestec accept that the machines were not provided to the consumers subject to any obligation of confidentiality. Dualit contend that it follows that the design of the machines, including the capsule insertion and extraction mechanism, was made available to the public. Dualit put their case in two ways, which I will consider in turn.

115. The first way is that a skilled person in the position of one of the consumers could have ascertained how the capsule insertion and extraction mechanism worked without disassembling the machine. Nestec dispute this, relying in particular on evidence given by Mr Innikel that he had tried to determine how the mechanism of an Essenza machine worked in 2005, but had been unable to do so without disassembling it (which he achieved by using pliers to remove the “tamper proof” screws). Against this, Dualit rely upon the fact that in cross-examination Mr Innikel substantially agreed with Mr Nicholson that all of the key features could be ascertained by carefully inspecting and touching the device. Nestec riposte that by the time they gave that evidence both witnesses had read the Patent.
116. I entirely accept that Mr Innikel did not in fact discover precisely how the mechanism worked without disassembling the machine. That is not conclusive as to what a skilled person would have been able to discover with sufficient care and patience, however. In my judgment the evidence establishes that all of the relevant features were susceptible to being identified by inspection and touch. Indeed, counsel for Nestec did not in his closing submissions specify any particular features of claim 1 (or most of the subsidiary claims) that a skilled person would not have been able to identify. The nearest he came to this was to suggest that the features of claim 8 would have been difficult to ascertain. Even in the case of claim 8, however, I consider that the skilled person could have identified the relevant features with care and patience.
117. In case I am wrong about that, I shall also consider the second way in which Dualit put their case. This is that a skilled person in the position of one of the consumers could have ascertained how the capsule insertion and extraction mechanism worked by disassembling the machine. Nestec do not contend that the machines were provided to the consumers subject to any contractual restriction which prohibited disassembly, nor do Nestec contend that the consumers were instructed not to disassemble the machines. Nestec nevertheless rely on the fact that the machines were supplied with “tamper proof” screws as showing that the machines were not intended to be disassembled. On that basis, Nestec argue that information which would only be revealed by disassembling a machine was not made available to the public.
118. I do not accept this argument. I understood counsel for Nestec to accept that the argument would not run if the machines had been supplied with ordinary screws. In my judgment it makes no difference that the screws were “tamper proof”. The screws were only “tamper proof” in the sense that slightly more specialised, but nevertheless widely available, equipment was required to undo them than ordinary screws. It follows that a skilled person in the position of the consumers could readily disassemble one of the machines. In the absence of any obligation of confidentiality, he would have been free in law and equity to disassemble the machine and to use the information gained thereby. Thus the information was made available to the public: see *Milliken Denmark A/S v Walk Off Mats Ltd* [1996] FSR 292 at 309-312.
119. *Venice Convention*. The Venice Convention took place on 11-13 June 2004. The purpose of the Venice Convention was to launch the Essenza to Nestec’s commercial partners, potential buyers and journalists. By the end of the trial, there was no dispute that a number of Essenza machines were on display and could be inspected, touched and photographed by delegates. I find that the machines were fitted with Italian plugs and were used to make coffee, including by delegates. I also find that none of the delegates had possession or custody of any of the machines at any stage, and therefore

a skilled person in the position of the delegates would not have had the opportunity to disassemble a machine. Again, Nestec do not contend that the delegates were subject to any obligation of confidentiality. Accordingly, I conclude that the Venice Convention made the design of the capsule insertion and extraction mechanism available to the public in the first way contended for by Dualit, but not the second way.

120. *Conclusion.* On the basis that (a) none of the claims is entitled to priority and (b) the Essenza falls within the claims, I conclude that all the claims lack novelty in the light of the information made available to the public by the Field Tests and the Venice Convention.

Novelty of claim 1 over the 1,2,3 Spresso

121. Dualit contend that claim 1 lacks novelty over the 1,2,3 Spresso. Given that the attack only goes to claim 1 and given my other conclusions, I shall deal with this briefly.
122. The 1,2,3 Spresso coffee pods are symmetrical pods similar to ESE pods, save that they have an outer rim which is reinforced with what appears to be cardboard. In use of the 1,2,3 Spresso machine, a coffee pod is dropped through a slot in the top of the machine into a pair of guides. The rim of the pod fits between the guides. The pod is then held in an intermediate position by a pivotable support at the bottom of the guides. In normal use, the pivotable support holds the pod in the intermediate position on an axis that is essentially coaxial with the extraction position. The coffee pod is then pushed forward along that axis into the extraction position by a filter plate with a smoothly chamfered edge. After extraction, the pivotable support is moved away allowing the pod to drop down. Thus features 1N and 1O of claim 1 are not present in normal use.
123. Dualit contend that in use there would have been build up of coffee grounds and/or coffee oils and/or limescale on the guides of 1,2,3 Spresso machines such as to cause the descent of the coffee pod through the machine to be stopped somewhat above the normal intermediate position. Nestec do not dispute that this is likely to have occurred from time to time. Dualit further contend that, at least on some occasions, as the movable part of the mechanism approached the pod, the chamfered edge of the filter plate element would have pulled the pod downwards and onto its extraction axis. This would deform the cardboard rim, allowing the pod to drop down following extraction. In this way features 1N and 1O would be present. Nestec contend that it is much more likely that in these circumstances the coffee pod would tear. Nevertheless, on the evidence I am satisfied that it is probable that the scenario postulated by Dualit will have occurred occasionally.
124. The issue then is whether that is sufficient as a matter of law to deprive claim 1 of novelty. Counsel for Dualit submitted that it was, since systems having all the features of claim 1 will have existed before the priority date. Counsel for Nestec submitted that it was not, since the skilled person would not have been taught to produce a machine falling within claim 1 as he would have appreciated that the machine was operating in a faulty and unintended manner. I have not found it easy to decide who is right about this, but on balance I find Nestec's submission more persuasive.

Obviousness

The law

125. The familiar structured approach to the assessment of allegations of obviousness first articulated by the Court of Appeal in *Windsurfing International Inc v Tabur Marine (Great Britain) Ltd* [1985] RPC 59 was re-stated by Jacob LJ in *Pozzoli v BDMO SA* [2007] EWCA Civ 588, [2007] FSR 37 at [23] as follows:

- “(1)(a) Identify the notional ‘person skilled in the art’;
- (b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- (3) Identify what, if any, differences exist between the matter cited as forming part of the ‘state of the art’ and the inventive concept of the claim or the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?”

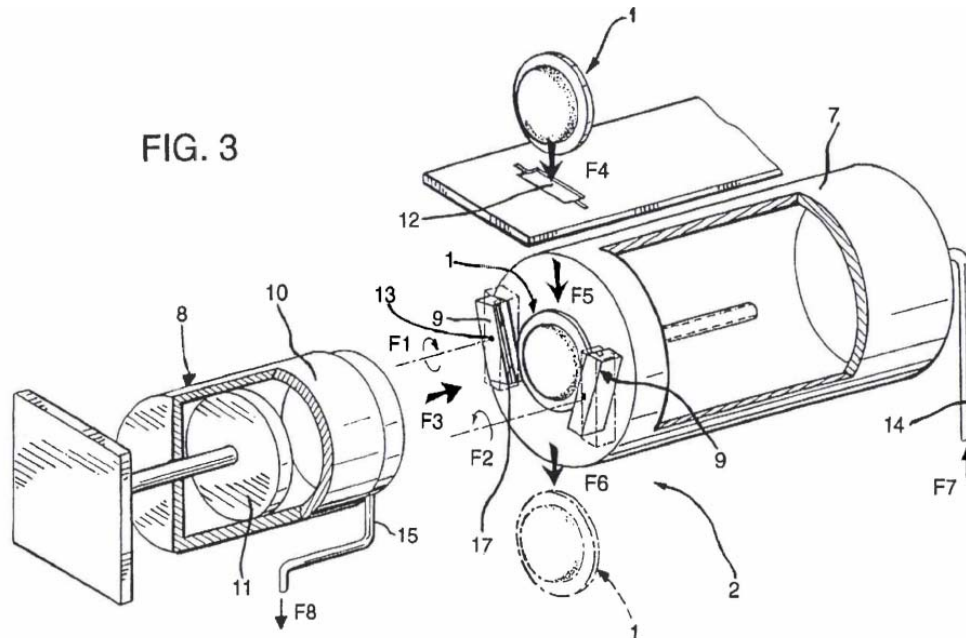
Obviousness over Blanc

126. *Blanc*. *Blanc* is entitled “Package of Ground Coffee of the Prefilled Tablet Type and Espresso Coffee Machine Using Such a Package”. It was granted on 7 July 1998. It describes a particular type of coffee pod, specifically an ESE type coffee pod with a rigid annular rim as a result of reinforcing the rim with cardboard, and a device for extracting coffee from those pods. The device enables the coffee pod to be inserted into the device through an opening in the top and dropped through the device once it has been used rather than be manually removed. As well as increasing the throughput of the machine, by permitting rapid loading and immediate re-use, the fact that the pods drop through the device after use, and do not need to be removed individually by hand after each extraction, adds significantly to user convenience.

127. The invention is summarised at column 2 lines 35 onwards. The pods (or tablets as they are referred to) are described at lines 36-60. They are said to be

“partially or totally circumscribed at the region of its periphery by at least one member, characterised by the fact that the member is of a sufficiently rigid material which serves as framework such that said tablet or the like has sufficient mechanical resistance to be usable in espresso coffeemakers, and that the rigid member, which serves as a framework, is disposed in the transverse plane of the central part which forms the disc containing the ground coffee or product to be infused.”

128. The coffee machine is then described between column 2 line 61 and column 3 line 21. The device comprises a water heater and a cylinder and piston assembly. The device is characterised “by the fact that it is constituted of abutments disposed at one end of the water heater in a position perpendicular to the longitudinal axis of the espresso coffeemaker, the cylinder and piston assembly co-acting with said water heater at said abutments to secure in position a coffee tablet or the like which is fixed by its member of rigid material, between the abutments on one hand and the water heater on the other hand”. The abutments are said to be “moveable along an axis parallel to the longitudinal axis of the espresso coffeemaker”.
129. The upper portion of the device comprises “a slot situated vertically above the abutments, such that the positioning of the rigid member of each tablet or the like between the abutments on the one hand, and the water heater on the other hand, is achieved simply by gravity”. Following extraction of the coffee pod, “said abutments are moved to be parallel to each other, the tablet or the like is not retained by its rigid member and falls outside the espresso coffeemaker simply by gravity”.
130. A detailed description follows, by reference to Figures 1-6. A single embodiment is described both of the pods and the coffee machine. The coffee pods (or tablets) comprise a bag made of filter paper, pre-filled with coffee. As shown in Figures 1 and 2, they resemble the ESE style coffee pods, with a thicker, reinforced annular rim or flange. The tablets are symmetrical and, whilst substantially flat, each opposite side meets the flange with a steep curved slope.
131. The machine is shown in Figure 3, which I reproduce below.



132. The coffee pods pass through the machine vertically while the brewing takes place horizontally. The pod (1) is inserted through the slot (12). It falls under gravity in the space between the brewing unit (7) and the piston assembly (8). The pod is caught by insertion slides in the abutments (9) which (in the closed position) point towards each other blocking the path of the pod. The cylindrical body (10) (pushed by the piston) then moves towards the tablet/brewing unit until it comes into contact with the

abutments (9) and the rigid rim of the tablet (as shown in Figure 5). The cylindrical body (and heater) contain recesses (as can be seen from Figures 4-6) to accommodate the tablet and the abutments. The cylindrical body continues to move forward pushing the cylindrical body, tablet and abutments towards the heater (which contains an equivalent hollow to receive the tablet). As the abutments are moved back towards the heater, the abutments move along their axles (13) against the action of springs (16).

133. The consequence of this is that the cylinder abuts the heater, save for the rigid rim of the tablet which serves as a sealing joint. The opposing recesses in the cylindrical body and heater to accommodate the tablet come together to form a brewing chamber. Once the extraction has taken place, the cylindrical body separates from the heater (as shown in Figure 4). This releases the springs (16) which move the abutments back to their original position.
134. The abutments are capable of pivoting about their axles (16) in directions F1 and F2 as shown in Figure 3. This pivoting enables the abutments to move between a closed position (holding the tablet in place to enable the extraction of the tablet) and an open position (enabling the tablet to fall out of the machine by gravity). The pivoting of the abutments is said to be automated as a function of the position of the cylindrical body, although that mechanism is not described.
135. *The differences – claim 1.* Nestec contend that Blanc does not disclose guide means as required by integers 1F-1H of claim 1. Dualit dispute this. In my judgment the slot and the insertion slides in the abutments disclosed by Blanc do constitute guide means within claim 1 as I have construed it.
136. It is common ground that Blanc does not disclose integers 1N and 1O of claim 1.
137. *Was it obvious – claim 1?* Even if Blanc does not disclose guide means, in my judgment it would be an obvious step to extend the walls of the slot downwards somewhat so as to approach the top of the insertion guides in the abutments, which would produce guide means falling within the claim.
138. As for integers 1N and 1O, there was little dispute between Mr Nicholson and Mr Innikel that the Blanc device would have to be substantially re-designed to produce something with those features. It was also common ground that the skilled person would not perceive that there was any technical advantage to be gained by doing so. In those circumstances, I am not satisfied that it has been established that claim 1 is obvious over Blanc.
139. Counsel for Dualit argued that claim 1 lacked an inventive step over Blanc because it was an arbitrary selection with no technical merit applying the principles explained in *Sandvik Intellectual Property AB v Kennametal UK Ltd* [2011] EWHC 3311 (Pat), [2012] RPC 23 at [179]-[185]. I do not accept this argument. In my view this cannot be categorised as a case of arbitrary selection from the prior art.
140. *Obviousness of claims 2, 5, 7 and 8.* In the light of my previous conclusion, the obviousness of these claims does not arise. If I am wrong about claim 1, I consider that the additional features of claims 2, 5, and 7 would be obvious, but not claim 8.

Insufficiency

141. I reviewed the law of insufficiency in *Sandvik v Kennametal* at [106]-[124]. As I explained at [119]-[120], a claim is invalid for insufficiency if it is truly ambiguous, that is to say, it does not merely have a “fuzzy boundary” but makes it impossible to decide whether the claim is infringed.
142. Dualit contend that claim 5 of the Patent as granted is invalid for insufficiency on this basis. Dualit point out that integer 5B requires that the stop means retain the capsule in an inclined manner relative to the axis of the capsule and that integer 5C requires the capsule to tilt slightly relative to that axis. What, then, does 5C add to 5B? I agree that the skilled person would be initially puzzled by this, but in my view he would conclude that the claim is tautologous and that 5C adds nothing to 5B. Accordingly, the claim is not insufficient.

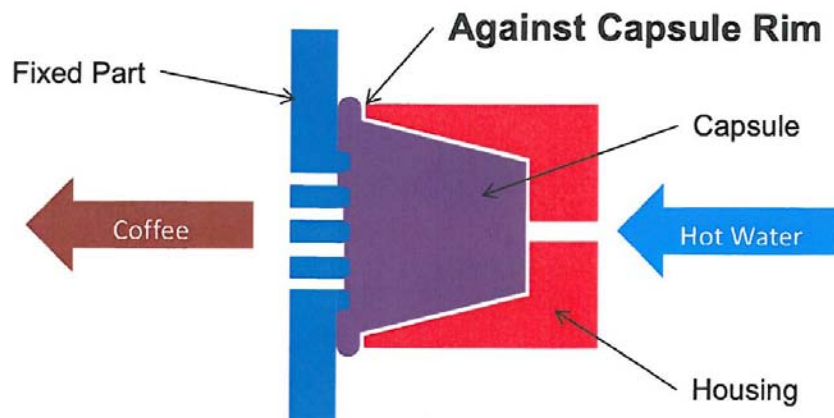
Amendment

143. As noted above, Nestec’s application to amend is a conditional one. The amendments have two purposes. First, the amendment to integer 1E is intended to restrict the claim to arrangements in which the housing is in the movable part, and thus address the priority issue relating to that integer. Secondly, the amendment to integer 1K is intended to address the added matter objection. In the light of my conclusions above, the former does not save the claims from anticipation and the latter is unnecessary. I shall therefore deal with the issues on amendment briefly.
144. Although Dualit raised a lack of clarity objection in relation to the amendment to integer 1E, that objection was resolved during the course of trial when it became apparent that there was a typographical error in Nestec’s amendment application.
145. Dualit maintain a lack of clarity objection to integer 1K. This arises out of the fact that, as proposed to be amended, integer 1K is limited to “offset” orientations of the capsule. Dualit argue that Nestec construe the amended claim as covering “inclined” orientations, and therefore the amended claim is unclear. I do not accept this argument. There may be room for argument as to the true construction of the amended claim, but I do not accept that makes it unclear within section 14(5) of the Patents Act 1977.
146. Dualit also contends that the amendment to integer 1K does not cure the original added matter objection and indeed adds further matter. I do not accept these contentions.

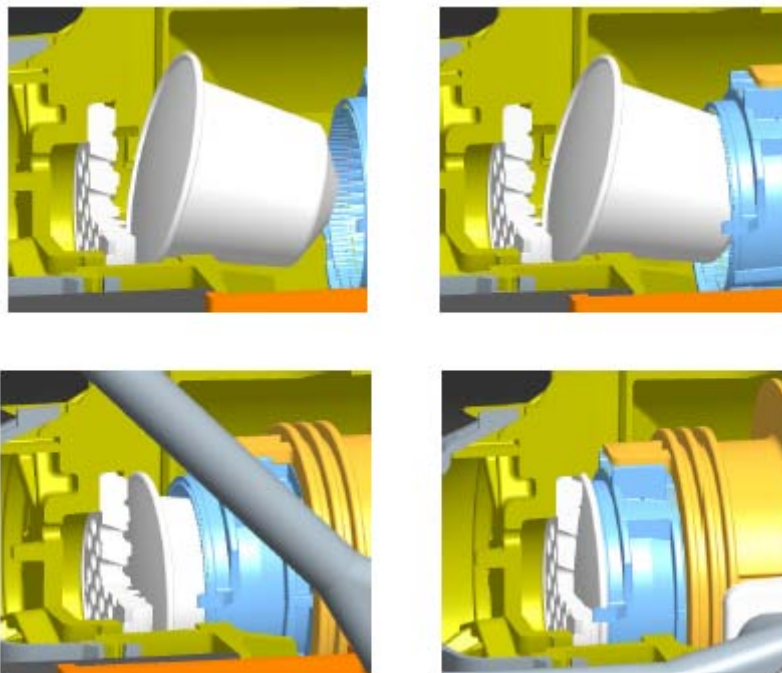
Infringement: do the systems fall within claim 1?

147. In order to establish infringement by Dualit, Nestec must first show that the combination of an NX Café Cap capsule with one of the ten Nespresso machines currently on the market constitutes a system falling within claim 1 of the Patent. Dualit dispute that integer 1E is satisfied in any case. In addition, Dualit dispute that integer 1M is satisfied in the case of the U and Pixie machines.

148. *Integer 1E*. It is common ground that, in each of the ten Nespresso machines, when the housing is closed to form the extraction chamber, the rim of the capsule is clamped between the movable part and the fixed part, as shown schematically below:



149. Dualit contend that this means that the movable part is not “against” the fixed part as required by integer 1E. As I have construed that integer, however, this requirement is satisfied.
150. *Integer 1M*. The Pixie and U machines incorporate the NBU and MNBU, as described in paragraphs 30 and 31 above, respectively. In the NBU and MNBU the extraction plate pushes the capsule into housing located in the fixed part. This process is illustrated in Figure 4 of Annex 7 of Nestec’s Product Description as follows, although it should be borne in mind that (contrary to what the diagrams appear to show) it is the white extraction plate on the left that moves, not the blue housing in the right:



151. In this arrangement, the extraction plate only exerts force on the capsule in the horizontal direction, not in the vertical direction. The capsule is nevertheless moved

downwards so that the flange passes below the stop means as a result of the interaction between the frustoconical shape of the capsule and the housing.

152. As I have construed integer 1M, this arrangement does not fall within the claim. Accordingly, the combination of an NX capsule with a Pixie or U machine does not constitute a system falling within claim 1.

Infringement: have Dualit committed infringing acts?

153. Assuming that the combination of an NX capsule and a Nespresso machine constitutes a system falling within claim 1 of the Patent, Nestec must next show that Dualit have committed infringing acts, that is to say, acts falling within section 60 of the 1977 Act. Nestec contend that Dualit have infringed pursuant to section 60(2). This contention gives rise to a series of issues.

Statutory provisions

154. Section 60 of the 1977 Act provides, so far as is relevant, as follows:

“(2) Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if, while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.

(3) Subsection (2) above shall not apply to the supply or offer of a staple commercial product unless the supply or the offer is made for the purpose of inducing the person supplied or, as the case may be, the person to whom the offer is made to do an act which constitutes an infringement of the patent by virtue of subsection (1) above.”

155. Section 130(7) declares that a number of sections in the 1977 Act, including section 60, “are so framed as to have, as nearly as practicable, the same effect in the United Kingdom as the corresponding provisions of the European Patent Convention, the Community Patent Convention and the Patent Co-operation Treaty have in the territories to which those Conventions apply.” Section 130(6) provides that references to the CPC are to “that convention as amended or supplemented”.

156. Articles 26 of the CPC, as revised in 1989, provides as follows:

“ARTICLE 26

Prohibition of indirect use of the invention

1. A Community patent shall also confer on its proprietor the right to prevent all third parties not having his consent from supplying or offering to supply within the territories of the

Contracting States a person, other than a party entitled to exploit the patented invention, with means relating to an essential element of that invention, for putting it into effect therein, when the third party knows, or it is obvious in the circumstances, that these means are suitable and intended for putting that invention into effect.

2. Paragraph 1 shall not apply when the means are staple commercial products, except when the third party induces the person supplied to commit acts prohibited by Article 25.
3. Persons performing the acts referred to in Article 27(a) to (c) shall not be considered to be parties entitled to exploit the invention within the meaning of paragraph 1.”

157. The background to Article 26, and hence section 60(2), was explained by Jacob LJ in *Grimme Landmaschinefabrik GmbH v Scott* [2010] EWCA Civ 1110, [2011] FSR 7 at [82]-[98].

A person other than a licensee

158. The first issue is whether a consumer who owns a Nespresso machine and purchases NX capsules for use with that machine is a “person other than a licensee or other person entitled to work the invention”. Dualit contend that the answer to that question is no. Counsel for Dualit put this contention in a number of different ways. His primary argument was that the owner of a Nespresso machine was impliedly licensed to use the machine in any way he or she pleased, including with compatible capsules.

159. The starting point for this argument is that, as is common ground, Nestec do not impose any legal restrictions on purchasers of Nespresso machines.

160. Counsel for Dualit relied upon the following passage from the speech of Lord Hoffmann, with whom the other members of the House of Lords agreed, in *United Wire Ltd v Screen Repair Services (Scotland) Ltd* [2001] RPC 24 (as well as other authorities to the same effect):

“68. ... The concept of an implied licence to do various acts in relation to a patented product is well established in the authorities. Its proper function is to explain why, notwithstanding the apparent breadth of the patentee’s rights, a person who has acquired the product with the consent of the patentee may use or dispose of it in any way he pleases. The traditional Royal Command in the grant of a patent forebode others not only to ‘make’ but also to ‘use, exercise or vend’ the invention. Similarly, section 60(1)(a) provides that a person infringes a patent for a product not only if he ‘makes’ it but also if, without the consent of the proprietor, he ‘disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise.’ Put shortly, the problem is to explain why, for example, a patentee cannot not complain when someone to whom he had sold the patented product then,

without any further consent, uses it or disposes of it to someone else. The answer given by Lord Hatherley L.C. in the leading case of *Betts v. Willmott* (1871) L.R. 6 Ch. App. 239, 245 (which concerned the resale of a patented product) was that he did so by virtue of an implied licence.

"I apprehend that, inasmuch as [the patentee] has the right of vending the goods in France or Belgium or England, or in any other quarter of the globe, he transfers with the goods necessarily the licence to use them wherever the purchaser pleases. When a man has purchased an article he expects to have the control of it, and there must be some clear and explicit agreement to the contrary to justify the vendor in saying that he has not given the purchaser his licence to sell the article, or to use it wherever he pleases as against himself."

69. An alternative explanation, adopted in European patent systems, is that of exhaustion of rights. The patentee's rights in respect of the product are exhausted by the first sale: see *Merck & Co. Inc. v. Primecrown Ltd.* [1997] 1 C.M.L.R. 83, 119. The difference in the two theories is that an implied licence may be excluded by express contrary agreement or made subject to conditions while the exhaustion doctrine leaves no patent rights to be enforced."
161. Counsel for Nestec accepted that the principle stated by Lord Hatherley in *Betts v Willmott* applied to the purchasers of Nespresso machines, and that it followed that the purchasers were entitled to use the machines as they pleased. He submitted, however, that it did not follow that they were impliedly licensed by Nestec to use the machines with compatible capsules supplied by third parties. He argued that no licence was conferred on purchasers to work patents for inventions extending beyond the machine itself, and in particular inventions relating to the capsule.
162. To illustrate this argument, counsel for Nestec pointed out that, until May 2011, the design of the Nespresso capsules had been protected by EP 148. Furthermore, it appears from the evidence of Mr Gort-Barten that Nestec's competitors had generally respected EP 148. Thus it was only once EP 148 had expired (or at any rate was nearing expiry) that competitors started marketing compatible capsules. Counsel for Nestec argued that a purchaser of a Nespresso machine was not impliedly licensed under EP 148, which was for a completely separate invention concerning the design of the capsule. So too, the Patent was for an invention concerning the interaction between the machine and the capsule.
163. I do not think any conclusion can be drawn from the fact (assuming it is a fact) that Nestec's competitors respected EP 148. A third party manufacturer or importer of compatible capsules would have infringed EP 148 (assuming it was valid) pursuant to section 60(1). The manufacturer could not have successfully argued that he was entitled to commit acts falling within section 60(1) in order to supply owners of Nespresso machines with consumables: compare *Canon KK v Green Cartridge Co*

(Hong Kong) Ltd [1997] AC 726. Accordingly, no issue under section 60(2) would have arisen.

164. In any event, I do not accept this argument. As counsel for Dualit pointed out, the purpose of a Nespresso machine is to make coffee. In order to use the machine for its intended purpose, the purchaser must insert capsules into the machine. It follows that the purchaser must be impliedly licensed to obtain and use capsules with the machine. Otherwise, it would be useless. In the absence of any restriction upon the purchaser preventing him from obtaining capsules from third parties, the purchaser is entitled to do so.
165. In my judgment it makes no difference even if it is the case that, as a result of the way in which the claim is drafted, the purchaser of the machine makes a system falling within claim 1 as soon as he acquires a capsule (as to which, see below). Suppose the invention was a clever new type of internal combustion engine, and the patent included claims drafted so as to require the presence of a special grade of petrol. Suppose that grade of petrol was neither itself protected by a patent nor a staple commercial product. Could it be suggested that the purchaser of a car containing a patented engine could not acquire the petrol otherwise than from the patentee or the patentee's licensees? Surely not. What matters is the substance of the invention, rather than the precise form of the claims. In the present case, the substance of the patented invention concerns the design of the machine. The specification of the Patent makes it clear that the invention does not lie in the design of the capsule. On the contrary, the specification proceeds on the basis that the capsule is of a pre-existing design. Indeed, the invention does not even depend upon the design of the capsule, save to the limited extent that claim 1 requires the capsule to have a guide edge in the form of flange.
166. Accordingly, I conclude that owners of Nespresso machines are impliedly licensed to acquire and use compatible capsules with their machines.
167. I would add that in my view the position is perhaps even clearer if it is analysed in terms of exhaustion of rights. By consenting to the manufacture and sale of Nespresso machines, Nestec have exhausted their rights under the Patent to restrict purchasers' freedom to use such machines in accordance with their normal function. Their normal function is to make coffee from capsules. Accordingly, Nestec have exhausted their right to rely upon the Patent to control the source from which purchasers acquire such capsules.

Means relating to an essential element of the invention

168. The next issue is whether the NX capsules constitute "means relating to an essential element of the invention". There appears to be no English authority as to the correct approach to this requirement which is directly in point, but it has been considered by the courts of a number of other countries which have implemented Article 26 CPC in their law, notably the courts of the Netherlands and Germany. Unhappily, the Supreme Court of the Netherlands and the Bundesgerichtshof (Federal Court of Justice) in Germany have adopted different approaches to this question.
169. In *Impeller Flow Meter* [Case X ZR 48/03] the reasoning of the Federal Court of Justice in relation to section 10 of the German Patents Act, which implements Article 26 CPC, was as follows:

“The criterion of the suitability of the means to interact functionally with an essential element of the invention in the implementation of the protected inventive idea excludes such means that – such as the energy needed for the operation of a protected device – might be suitable for being used in the exploitation of the invention but which contribute nothing to the implementation of the technical teaching of the invention. If a means makes such a contribution, it will, on the other hand, generally not depend on the feature or features of the patent claim that interact with the means. For, what is an element of the patent claim is, as a rule for this reason alone, also an essential element of the invention. The patent claim defines the protected invention and limits the protection granted to the patent holder to forms of exploitation that implement all the features of the invention. As a mirror image of each individual feature’s function to limit protection in this way, each individual feature is fundamentally also an appropriate point of reference for the prohibition on the supply of means within the meaning of Sec. 10 of the Patent Act. In particular, it is not possible to determine the essential element of an invention according to whether they distinguish the subject matter of the patent claim from the state of the art. It is not infrequently the case that all the features of a patent claim as such are known in the state of the art. For this reason, this does not provide a suitable criterion for differentiation.”

170. Thus the Court proceeded on the basis that the means in question must contribute to implementing the technical teaching of the invention. It rejected the contention that a feature could only be an essential element of the claim for this purpose if it served to distinguish the subject matter of the claim from the prior art i.e. was novel in its own right.
171. This reasoning was amplified by the Court in *Pipette System* (Case X ZR 38/06) as follows:
 - “18. In accordance with the case law of the Senate, a means refers to an essential element of the invention if it is suitable to interact in a functional way with one or several features of the patent claim when implementing the protected thought behind the invention (BGHZ 159, 76, 85 - Impeller Flow Meter). Means that can be used during the application of the invention but which however contribute nothing to the implementation of the teachings of the patent are not covered by these criteria. If a means provides such a contribution, it does not in principle matter with which feature or features the means interacts. This is because what is a part of the patent claim is regularly already therefore an essential element of the invention (BGHZ 159, 76, 86). The Appeal Court has correctly assumed this.
 19. The nozzles in dispute relate to an essential element of the invention. The nozzle is part of the object according to the invention, which consists of the combination of a hand pipette and nozzle, which forms the protected ‘system’ (feature 1). With the fastening section and nozzle piston, the nozzle itself is designed in accordance with feature

2 and, as a result, suitable to interact with the pipette in a functional way when implementing the thought behind the invention, in that the retention device in accordance with feature 5 grips and fix in the mountings of the fastening section of the pipette housing and the piston collar of the nozzle in accordance with the features 7 and 9 grip and release again by activating the activation arms, without the nozzle itself having to be touched.

20. This is sufficient in itself for functional interaction. In this respect, it does not matter wherein the core of the invention lies. However, a feature that has a completely subordinate importance for the technical teachings of the invention can be seen as a non-essential element of the invention; such an irrelevancy for the inventive concept cannot be explained by stating that these features are known in prior art (BGHZ 159, 76, 86). The viewpoint argued as the centrepiece of the appeal on points of law, namely that the features of the nozzle contained in the patent claim relate to conventional commercially-available nozzles, is therefore insignificant. A lack of 'essentiality' can only result in a feature not contributing anything to the performance of the product, i.e. to the solution of the technical problem on which the patent is based in accordance with the invention, whereby a contribution that is practically meaningless can be left out of consideration. This comes into consideration if, for an invention that is concerned with the continuation of a certain function of a device known as such, features are included in the patent claim that concern another function of the device not affected by the invention. Such a situation is out of the question in the present dispute, in which the relationship of the nozzle as an essential element of the invention already results from the fact that it is precisely the nozzle, its fixing to the fastening section and nozzle pistons in a certain position that serve the design in accordance with the invention.
21. The second appeal can therefore also not succeed with the objection that that patent claim should have been aimed at a hand pipette instead of a system consisting of pipette and nozzle. The patent applicant cannot be prescribed on how to formulate the patent claims. Instead it can basically demand the grant of the patent in each way that corresponds to the technical teachings and is patentable (BGHZ 166, 347 349 et seq. - Microprocessor). Since the invention deals with the problem of improving the mechanics of coupling the nozzle to the pipette and disconnecting the nozzle from the pipette, it is possible and not a breach of law to include the syringe in the definition of the patented object."
172. Again the Court emphasised that the fact the element was known in the prior art did not prevent it being an essential element of claim, but did accept that if a feature was of completely subordinate importance for the technical teaching of the invention it could be regarded as a non-essential element.

173. In *Sara Lee v Integro* (Case C02/227HR), on the other hand, the Dutch Supreme Court upheld the conclusion of the Court of Appeal that an essential element must be one which distinguished the invention from the prior art:

“Insofar as the part complains about the explanation that the Court of Appeal thus gave to the patent, it miscarries due to what has already been considered under 3.3.2. It also miscarries otherwise. The mere circumstance that a fitting coffee bag is needed for putting the patented mechanism into effect does not automatically mean that this bag is a means relating to an essential part of the invention. Evidently and in light of the explanation that the Court of Appeal has given to the patent, the Court of Appeal was of the opinion that the coffee bag fitting the holder does not comprise an element by which, according to the patent specifications, the doctrine of the patent distinguishes itself from the state of the art. That opinion does not show any incorrect interpretation of the law.”

174. In addition to these cases, I was referred to decisions of French and Belgian courts which appear to be more consistent with the German approach than the Dutch one.
175. In my judgment the German approach is more consonant with the apparent purpose of Article 26(1), which is that third parties should not be allowed to benefit from the invention by supplying means the market for which has been created by the invention, than the Dutch one. Furthermore, I consider that the Dutch approach is difficult to reconcile with Article 26(2), which makes it clear that a staple commercial product may constitute means relating to an essential element. Accordingly, I propose to follow the German approach.
176. Applying that approach, I consider that the capsule does constitute means relating to an essential element of claim 1 of the Patent. In my view the capsule does contribute to the implementation of the technical teaching of the invention, and is not of completely subordinate importance. Although the invention takes the capsule as a given, and claim 1 only requires the capsule to have a guide edge in the form of a flange, the flange of the capsule plays a significant role in the way in which the claimed invention works.

Staple commercial products

177. The next issue is whether, assuming the NX capsules are “means relating to an essential element of the invention”, they are “staple commercial products”.
178. The only European authority on the interpretation of “staple commercial product” which was cited to me is the following passage from the judgment of HHJ Ford sitting in the Patents County Court in *Pavel v Sony Corporation* (unreported, 13 January 1993):
- “6.4 ... In ordinary language, a staple commercial product is a commodity or raw material, not a manufactured article like a tape cassette player with headphones. Since the language of section 60 has been framed to have, as nearly as practicable, the same effects in the United Kingdom as the corresponding provisions of the Community Patent Convention

..., guidance may be obtained, in the absence of English authority in case law, from the parallel French and German texts of that Convention and commentary thereon. ...

In the English text, Art. [26(2)] refers to “staple commercial products.” The French text refers to ‘produits qui se trouvent couramment dans le commerce’. The German text refers to ‘allgemein im Handel erhältliche Erzeugnisse’.

- 6.5 The German text has been interpreted to mean products that are of a kind which is needed every day and can be generally obtained, such as nails, screws, bolts, wire, chemicals, plastics etc (‘Denkschrift zu Art. 30 GPU’ in *Blatt für Patent – Muster – und Zeichenwesen*, Vol 79 p 333). Schulte (*Patentgesetz*, 4th ed. 1987, p.153, note 18) considers that, in principle the products in question must be generally available at the time of publication of the patent specification, otherwise there is a presumption that they were put into circulation with knowledge of the invention, to enable it to be used.”
179. Counsel for Dualit accepted that “products that are of a kind which is needed every day and can be generally obtained” was a useful working definition of “staple commercial product”. He nevertheless submitted that the definition should be qualified or elaborated in two ways.
180. First, he submitted that the product in question should be considered at the same level of abstraction as the claim in question. In the present case claim 1 calls for “capsules with a guide edge in the form of a flange”. Counsel argued that it followed that the question was whether capsules with a guide edge in the form of a flange were staple commercial products, and that the answer to that question was yes. This is an ingenious argument, but I do not accept it. It is clear from Article 26(2) that the exception to Article 26(1) only applies where the means supplied by the defendant is a staple commercial product. In my judgment this refers to the actual product supplied by the defendant, not the feature of the claim which the product satisfies.
181. Secondly, he submitted that the question whether the means constituted a staple commercial product fell to be judged as at the date of the alleged infringement rather than, as counsel for Nestec argued, the date of the patent. Thus in principle a product could be a staple commercial product as at the date of the infringement even if it was not as at the date of the patent. He accepted, however, that a product which became widely available as a result of the invention would not qualify. I accept this submission.
182. Turning to the facts of the present case, I do not consider that NX capsules are staple commercial products. I agree with the view expressed by Justice Crennan of the High Court of Australia in *Northern Territory of Australia v Collins* [2008] HCA 49 at [145], albeit in a slightly different statutory context, that in order to qualify as a staple commercial product, a product must ordinarily be one which is supplied commercially for a variety of uses. NX capsules were specifically designed for use with Nespresso machines. When they were first introduced, they had no other use. Subsequently, Dualit have introduced the NX Adapter, which enables NX capsules to be used in some other types of coffee machines. More recently, Dualit have also launched their

own design of coffee machine, which accepts NX capsules among other options. Thus even now NX capsules have no other use other than with a limited range of portionised coffee machines.

Means suitable for putting the invention into effect

183. The final issue is whether NX capsules constitute “means suitable for putting the invention into effect”. It is common ground that this depends on whether a person who purchases an NX capsule for use together with a relevant kind of Nespresso machine thereby “makes” a system falling within claim 1 of the Patent. Nestec accept that some kinds of Nespresso machines are not relevant for this purpose, since they do not function in accordance with claim 1. It follows from my previous conclusions that eight of the ten types alleged by Nestec to be relevant are indeed relevant for this purpose.
184. The law as to the circumstances in which a person “makes” a “product” within the meaning of section 60(1)(a) of the 1977 Act, which corresponds to Article 25(a) CPC, was considered by the House of Lords in *United Wire* and has recently been reviewed by the Supreme Court in *Schutz (UK) Ltd v Werit UK Ltd* [2013] UKSC 16, [2013] 2 All ER 177. Both of those cases were concerned with a situation in which the issue was whether the defendant was making a product falling within the claims of the patent or was merely repairing or re-conditioning such a product. In the present case no one suggests that a person who purchases an NX capsule for use together with a Nespresso machine is repairing or re-conditioning either the machine itself or the system comprised by the combination of the machine and the capsule. Nevertheless, it is common ground that the guidance provided by the House of Lords and the Supreme Court is relevant to the issue in the present case.
185. *United Wire* involved two patents for a screen consisting of a frame to which two meshes of different mesh sizes were adhesively secured at the periphery so as to be at different tensions. The meshes quickly become torn in use. The patentee therefore enjoyed an aftermarket in selling replacement screens made in accordance with the inventions. The defendants sold reconditioned screens made from the patentee’s own frames. The frames were made of metal, weighed about 10 kilos and were durable compared to the rest of the materials of the screen. The defendants acquired the frames from the patentee’s customers and stripped them down to the bare metal by sandblasting. They re-coated the frames with adhesive polyethylene and attached the two layers of mesh. The differences in the sizes of the mesh produced the necessary differential tensions when both were tensioned together. Heat was then used to bond the meshes to the polyethylene coating of the frame, the selvage of mesh around the frame was cut off and the edges were trimmed and taped.
186. The House of Lords held that the defendants had made products in accordance with the patents. Lord Bingham and Lord Hoffmann gave reasoned speeches, with which the other Law Lords agreed. Lord Bingham thought the issue was simply whether the defendants “made” the patented article, to which the answer was a question of judgment, and that it was better not to ask whether the defendants’ work involved “repair”.
187. Lord Hoffmann said that the real issue was whether the defendants had made the patented product. He quoted with approval a statement made by Lord Halsbury LC in

Sirdar Rubber Co. Ltd v Wallington, Weston & Co. (1907) 24 R.P.C. 539, 543 that “you may prolong the life of a licensed article but you must not make a new one under the cover of repair”, but then he warned of the dangers of asking whether the work constituted repair. Having recorded the appellant’s submission that the question was one of fact and degree, and therefore the Court of Appeal ought not to have reversed the trial judge, he concluded at [73] by saying that:

“... in this case the Court of Appeal was in my opinion entitled to substitute its own evaluation because I think, with great respect to the judge, that he did not correctly identify the patented product. He said that the frame was an important part of the assembly and that the defendants had prolonged ‘the screen’s useful life’. It is quite true that the defendants prolonged the useful life of the *frame*. It would otherwise presumably have been scrapped. But the *screen* was the combination of frame and meshes pre-tensioned by attachment with adhesive according to the invention. That product ceased to exist when the meshes were removed and the frame stripped down to the bare metal. What remained at that stage was merely an important component, a skeleton or chassis, from which a new screen could be made.”

188. In *Schutz v Werit* the patent concerned intermediate bulk containers (“IBCs”). IBCs are large containers used for the transport of liquids. IBCs of a two-part construction resting on a flat pallet have been well known for many years. They consist of a metal cage into which a large plastic container (or “bottle”) is fitted. While the cage has a limited life-span, it has a significantly longer life expectancy than a bottle: on average, it is about five or six times as long. “Reconditioners” engage in “re-bottling” or “cross-bottling” used IBCs. In either case the old bottle is removed, any damage to the cage repaired, and a new bottle is fitted within the cage. Re-bottling involves replacing the bottle with a fresh bottle from the original manufacturer. Cross-bottling involves replacing the bottle with a bottle from a different source.
189. The patented invention, of which Schutz was the exclusive licensee, concerned the use of the idea of flexible weld joints in the cage, to increase its strength and durability. More specifically, the inventiveness lay in the idea of introducing a dimple on either side of the weld and a central raised portion. Claim 1 of the patent was to a complete IBC i.e. a pallet, a bottle and a cage. The specification acknowledged that the bottle was “exchangeable” i.e. replaceable.
190. Werit sold bottles for IBCs to a reconditioner, Delta. Delta used Werit’s bottles to cross-bottle cages from used Schutz IBCs. Schutz alleged infringement by Werit pursuant to section 60(2). The issue in the Supreme Court was whether Delta had made IBCs falling within claim 1 of the patent. The Supreme Court held that it had not.
191. Lord Neuberger, with whom the other members of the Supreme Court, set out in his judgment a number of considerations which should be borne in mind in interpreting the word “makes” in section 60(1):
 - “26. ... First, the word ‘makes’ must be given a meaning which, as a matter of ordinary language, it can reasonably bear. Secondly, it is not a term

of art: like many English words, it does not have a precise meaning. Thirdly, it will inevitably be a matter of fact and degree in many cases whether an activity involves ‘making’ an article, or whether it falls short of that.

27. Fourthly, the word ‘makes’ must be interpreted in a practical way, by reference to the facts of the particular case. Fifthly, however, there is a need for clarity and certainty for patentees and others, and for those advising them. Sixthly, it should be borne in mind that the word applies to patents for all sorts of products, from machinery to chemical compounds. Seventhly, one should bear in mind, at least as part of the background, the need to protect the patentee's monopoly while not stifling reasonable competition.
28. Eighthly, the word ‘makes’ must be interpreted bearing in mind that the precise scope of a claim may be a matter almost of happenstance in the context of the question whether the alleged infringer ‘makes’ the claimed product. Lord Diplock described the specification of a patent as ‘a unilateral statement by the patentee, in words of his own choosing’ by which he states “what he claims to be the essential features of the new product” – *Catnic Components Ltd v Hill & Smith Ltd* [1982] RPC 183, 242. As Lord Hoffmann explained in *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd* [2004] UKHL 46, [2005] 1 All ER 667, [2005] RPC 169, para 21, a claim is, or at least should be drafted ‘not only ... in the interest of others who need to know the area “within which they will trespassers” but also in the interests of the patentee, who needs to be able to make it clear that he lays no claim to prior art or insufficiently enabled products’. As Lord Hoffmann went on to explain in para 35, all sorts of factors, only some of which may appear to be rational, can influence the person drafting a claim.
29. Ninthly, where, as here, there is a decision (*United Wire*) of the House of Lords or this court on the meaning of the word, it cannot be departed from save for very good reasons indeed. Finally, particularly given that section 60 (like section 125) is one of the sections mentioned in section 130(7) of the 1977 Act, the word should be interpreted bearing in mind that it is included in a provision which is intended to be part of a scheme which applies in many other jurisdictions.”
192. Lord Neuberger went on at [37]-[47] to consider the jurisprudence of the Federal Court of Justice on this question. He also discussed at [48]-[53] the distinction between making and repairing, concluding that, while it should not be allowed to obscure the central issue of whether the alleged infringer “makes” the patented article, it may sometimes be useful to consider whether the alleged infringer is repairing rather than making the article.
193. Lord Neuberger went on at [61]-[72] to set out a number of factors which he considered relevant to the question of whether Delta’s activities amounted to making the patented articles. He began by saying that it was both legitimate and helpful to

consider whether the bottle was such a subsidiary part of the patented article that its replacement, when required, did not involve “making” a new article. He acknowledged that the bottle was an essential and physically large part of the patented article, but nevertheless considered that the bottle could fairly be said to be a relatively subsidiary part of the article, viewed as a whole.

194. In that regard, he said that two points were of significance. The first was that the bottle had a significantly lower life expectancy than the cage. The fact that one would expect the bottle to be replaced, on average, five or six times during the life of the cage supported the notion that it was a subsidiary part. Furthermore, whereas the cage was made of metal, the bottle was made of plastic, and thus relatively perishable. In those circumstances the purchaser of an IBC was entitled to assume, in accordance with *Betts v Wilmot*, that he could replace the bottle.
195. The second point was that the bottle did not include any aspect of the inventive concept of the Patent. Lord Neuberger considered that it must be legitimate, in the context of addressing the question whether a person “makes” the patented article by replacing a worn out part, to consider whether that part includes the inventive concept, or has a function which is closely connected with that concept.
196. Lord Neuberger then proceeded to highlight two contrasts between the facts of the instant case and those in *United Wire*. The first was that in *United Wire*, the replaced part, the wire mesh system, had no independent identity from the retained part, the frame. Hence it was possible for Lord Hoffmann to say that the original product ceased to exist when the meshes were removed. By contrast, in the instant case there were, as it were, two products (disregarding the pallet). The cage, which was significantly longer lasting, more substantial, and the only inventive component, did not cease to exist when the old bottle was removed.
197. Secondly, there was a significant difference between the nature of Delta's operations in the instant case and that of the defendants' operations in *United Wire*. In *United Wire*, (i) the replaced part was integrally connected to the retained part, so the work included a significant element of demolition, (ii) the replaced part was subjected to significant improvement work, (iii) the inventive concept either largely resided in the replaced part (the first patent) or was closely connected to that part (the second patent), and (iv) the work involved could undoubtedly be described as manufacture. Merely replacing a damaged plastic bottle with a new plastic bottle within the cage, where the cage contained the inventive concept, was an exercise of a very different order.
198. Lord Neuberger summarised his reasoning at [78] as follows:

“Deciding whether a particular activity involves ‘making’ the patented article involves, as Lord Bingham said, an exercise in judgment, or, in Lord Hoffmann's words, it is a matter of fact and degree. In some such cases, one can say that the answer is clear; in other cases, one can identify a single clinching factor. However, in this case, it appears to me that it is a classic example of identifying the various factors which apply on the particular facts, and, after weighing them all up, concluding, as a matter of judgment, whether the alleged infringer does or does not ‘make’ the patented article. In the present case, given

that (a) the bottle (i) is a freestanding, replaceable component of the patented article, (ii) has no connection with the claimed inventive concept, (iii) has a much shorter life expectancy than the other, inventive, component, (iv) cannot be described as the main component of the article, and (b) apart from replacing it, Delta does no additional work to the article beyond routine repairs, I am of the view that, in carrying out this work, Delta does not ‘make’ the patented article”

199. Turning to the present case, I consider that the following matters are of significance in determining whether the owner of a Nespresso machine of a relevant kind “makes” the system claimed in claim 1 of the Patent when he or she acquires a capsule.
200. First, I consider that it is clear from the following facts that the capsule is an entirely subsidiary part of the system:
- i) the Nespresso machines sell for hundreds of pounds, whereas the capsules sell for 20-30p each;
 - ii) the machines are intended to last for many years, and make thousands of cups of coffee, whereas the capsule is intended to be used once and then discarded;
 - iii) the capsules contain ground coffee which is perishable (Nespresso capsules have a “best before date” of 12 months from the date of manufacture, which is likely to equate to about eight months from the date of purchase);
 - iv) the functioning of the machine is not altered by the presence or absence of the capsule - the machine is as capable of performing the necessary movements to cause a flanged capsule to be moved through its various positions within the machine whether or not the machine’s owner actually has a capsule in his or her possession; and
 - v) the presence or absence of a capsule does not affect the economic value of the machine, although the machine would be useless without a supply of capsules.
201. Secondly, both the machines and the capsules have an independent commercial existence. This is not merely because they are sold separately by Nestec, although they are. In the case of the machines, there is a market for second-hand machines, for example on Amazon and eBay. In the case of the capsules, it is common ground that it is not an infringement of the Patent for an owner of a Nespresso C100, C200, C1100 or Concept machine to use NX capsules. The same is true of an owner of a third party make of coffee machine who uses an NX Adapter and an owner of a Dualit coffee machine.
202. Thirdly, given that the capsules are consumables, I consider that purchasers of machines would assume that they were entitled to obtain capsules to use with the machine from whatever source they pleased. I recognise that it must be assumed for this purpose that they are not impliedly licensed under the Patent, but even so it is clear from Lord Neuberger’s reasoning that this consideration remains relevant.
203. Fourthly, the capsule does not embody the inventive concept of the Patent. It is true that, as I have already held, the flange of the capsule plays a significant role in the

way in which the claimed invention works. Nevertheless, it remains the case that the invention takes the capsule as a given and that the specification explicitly states that the invention can be used with any type of capsule (provided it has a flange). The invention is all about the way in which the machine operates. The fact the claims require the presence of a capsule is an artefact of clever claim drafting. In my view, it may be inferred that the reason why the granted claims require the presence of the capsule (whereas the claims in the Priority Document did not) is precisely in order to enable Nestec to argue that the mere supply of capsules constitutes an infringement and thus to enable Nestec to continue to control the market in capsules even though EP 148 has expired.

204. Fifthly, it is manifest that the owner of the machine is not even doing anything which would ordinarily be described as repairing a product, let alone making one. The only reason why Nestec is even able to argue that the owner is “making” something is that the claim is directed to a “system” which consists of a collocation of two entirely separate, but conceptually related, products (namely the machine and the capsule). Only in the world of patents could it even be suggested that a person “makes” a “product” merely by purchasing a consumable for use with a machine (i.e. before they have even used the consumable in the machine, here by making a cup of coffee).
205. In the light of these matters, I conclude that owners of relevant Nespresso machines do not “make” the claimed system when they purchase NX capsules.

Summary of main conclusions

206. For the reasons given above, I conclude that:
- i) the Patent is not entitled to priority from the Priority Document;
 - ii) the Patent is not invalid for added matter;
 - iii) claims 1, 2, 7 and 8 lack novelty over the Priority Document;
 - iv) all the claims lack novelty in the light of the Field Tests and the Venice Convention;
 - v) claim 1 is novel over the 1,2,3 Spresso;
 - vi) none of the claims is obvious over Blanc;
 - vii) claim 5 is not insufficient;
 - viii) Nestec’s amendment application does not save the Patent from invalidity;
 - ix) systems comprising NX capsules fall within claim 1 of the Patent where the machine is one of the current Nespresso machines other than the U or Pixie; and
 - x) even if the Patent is valid, contrary to my previous conclusions, Dualit have not committed any act of infringement within section 60(2).