

Neutral Citation Number: [2010] EWCA Civ 1110

Case No: A3/2009/2582

**IN THE HIGH COURT OF JUSTICE
COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE HIGH COURT OF JUSTICE
CHANCERY DIVISION (PATENTS COURT)
The Hon Mr Justice Floyd
[\[2009\] EWHC 2691 \(Pat\)](#)**

Royal Courts of Justice
Strand, London, WC2A 2LL
15/10/2010

Before:

**THE RT HON LORD JUSTICE JACOB
THE RT HON LORD JUSTICE EHERTON
and
SIR DAVID KEENE**

Between:

Grimme Maschinenfabrik GmbH & Co KG

**Claimant &
Appellant/
Respondent**

- and -

Derek Scott (t/a Scotts Potato Machinery)

**Defendant &
Appellant/
Respondent**

**Mr M Chacksfield (instructed by Marks & Clerk Solicitors LLP) for the Claimant &
Appellant/Respondent**

Mr G Fernando (instructed by Gordons) for the Defendant & Appellant/Respondent

Hearing dates: 27/28/29 July 2010

HTML VERSION OF JUDGMENT

Lord Justice Jacob:

1. This is the joint judgment of Lord Justice Etherton and myself. We have both contributed to it though I fear I have had the larger share.
2. The appeal and cross-appeal are from a judgment of Floyd J of 3rd November 2009, [\[2009\] EWHC 2691 \(Pat\)](#). The patentees, Grimme, sued Mr Scott for infringement of its EP (UK) No. 730,399 ("the Patent") and for infringement of unregistered design right. Mr Scott resisted those claims (save for some minor aspects of design right infringement) and in turn sought revocation of the Patent, relief for unjustified threats of patent infringement and in respect of some allegedly untrue statements made in letters sent by Grimme's solicitors to his customers.
3. Many of the points decided by the Judge are no longer pursued. But quite a few remain live. They are confined to issues about the Patent and the unjustified threats claim and include a point of general application about the meaning of s.60(2) of the Patents Act 1977.

The Issues and how they were argued

4. The Judge held that claim 1 of the Patent was invalid but that claims 17 and 24 were valid. He held that Mr Scott's Evolution separator when fitted with two pairs of elastomeric rollers infringed claim 17. And, even when the machine was sold with a steel "clod roller" (and so did not fall within the claim) there was so-called "contributory infringement" pursuant to s.60(2) of the Patents Act 1977. The Judge also held that certain letters sent to Mr Scott's customers, although threats of patent infringement, were justified and so not actionable pursuant to s. 70 of the Patents Act 1977.
5. Before us the issues at the outset of the hearing were agreed to be as follows:

Claim 1

Grimme's appeal

1. Construction:

i. Meaning of "*at least one conveyor lip, rib or like extension part*";

ii. Meaning of "*an elastically deformable shell part ... [the conveyor lip, rib or like extension part] projecting beyond the contours of the cylindrical shell*".

2. If successful on either of the two points of construction above, is claim 1 obvious over Rollastar?

Mr Scott's Respondent's notice

3. Obviousness of claim 1 over Dahlmann rollers (in the light of common general knowledge ("cgk") including the Rollastar and beet rollers),

4. Obviousness of claim 1 over cgk and Spatz,

5. Obviousness of claim 1 over the Pearson Patent and cgk.

Claim 17.

Mr Scott's Appeal

6. Obviousness of claim 17 over cgk (including (a) Rollastar, (b) Dahlmann rollers and (c) beet rollers);

7. Obviousness of claim 17 over cgk and Spatz;

8. Obviousness of claim 17 over cgk and Kverneland.

Grimme's Respondent's notice

9. Claim 18.

10. Obviousness of claim 24.

Contributory infringement under s60(2) of the Patents Act 1977.

11. Does the sale of all or any machines with steel clod rollers infringe pursuant this provision?

Unjustified threats under s70 of the Patents Act 1977.

12. Did Grimme make unjustifiable threats?

6. It seemed to the Court, and Mr Chacksfield for Grimme and Mr Fernando for Mr Scott agreed, that a sensible way to proceed was to consider first whether the Judge's construction of claim 1 was correct or whether it was, as Grimme contended, narrower. If we concluded it was narrower, then we should consider the question of its obviousness. The advantage of this course was that if we concluded that claim 1 was valid, then the separate points sought to be raised by Mr Scott about claims 17 and 24 would fall away. Finally, it was agreed that, unless we found the Patent wholly invalid, we should proceed to consider the points arising under s.60(2) and the threats claim.
7. After hearing the first point the Court felt confident enough to tell the parties that we considered Grimme were right about the construction of claim 1. It is narrower than held by the Judge.
8. Before coming to our reasons for this view it is necessary to get some matters out of the way.

Principles of claim construction

9. These were not in dispute. "The task for the court is to determine what the person skilled in the art would have understood the patentee to have been using the language of the claim to mean": see *Kirin Amgen v TKT* [2005] RPC 9 [30]-[35]. It follows that the court must ascertain first the nature of the skilled addressee and what the common general knowledge of that addressee would have been at the relevant time – in this case by common consent, November 1993.

The Skilled Addressee

10. The Judge made a finding about the nature of the skilled addressee which was not in dispute:

[16] He or she would be a designer of agricultural machinery, with experience of potatoes and other root crops. The skilled addressee would not necessarily be a potato specialist, although he would be familiar with the generally known existing machines for harvesting and separating potatoes.

The Common General Knowledge

11. As to the relevant cgk it included two machines which had become market leaders, namely the Rollastar and the Dahlmann. They featured prominently in the argument so we go to them first.

Rollastar and Pearson

12. The Rollastar was itself the subject of a patent called Pearson. The application for Pearson (UK Appn. 2,145, 612A) was also relied upon to invalidate the Patent. As to the actual machine (which came on the market in 1983 and gained rapid success) the Judge described it as follows:

One well known potato separator ("the Rollastar") used transverse rotating star wheels which rotated in the same direction ("co-rotated"), carrying the potatoes along the tips of the stars and allowing some earth to fall between them. After the star wheels came a clod roller rotating in the opposite direction to the star wheels ("counter-rotating"). This pair of counter-rotating rollers nipped the haulm and other material and dragged it down between them. The crop was passed over the clod roller for further treatment (Judgment [4]).

13. We were shown a video clip of a working Rollastar. One can see the potatoes jiggling along on the tops of pairs of rotating stars, arriving at the clod roller, falling forward from the star wheels onto the roller. A few, small, potatoes fall into the "nip" between the roller and the star wheel but most pass over that. The haulm gets dragged down.

14. The Judge elaborated on his description later, saying that the skilled person would have known:

The details of the operation of the Rollastar machine. These would typically have two rows of stars followed by a clod roller, followed by a repetition of that series. The star wheels co-rotate and the clod roller counter-rotates. The axes of the two star rollers are in the same horizontal plane, whilst the clod roller is

normally positioned below that plane. The position of the clod roller is highly adjustable to alter aggressiveness. The intention is that, in normal use, most of the crop will pass over the clod roller, typically glancing it on the way through. Raising the clod roller will increase aggressiveness, but crop landing in the space between the last star wheel and the clod roller, may be pulled through and therefore lost, [17(i)]

15. The Rollastar was not perfect. The Judge found that:

Rollastars tended to clog up in the wet and were only moderately good at extracting haulm (Judgment [5]).

So there was a clear motive to improve things over the Rollastar.

16. It is convenient here, although departing from what was ckg, to say a little about the Pearson patent. It shows a machine broadly the same as the actual Rollastar save for some minor differences. Firstly the individual star wheels are shown spaced apart by separate collars. In the actual machine the collars are integral with the wheels. Secondly the clod roller is not adjustable though it is spring mounted to cope with large stones. Thirdly Pearson says that although it is possible to use only one star roller instead of a pair, one of the advantages of two rows of star rollers is that if you arrange them to be close to each other so that the points of the stars pass close to the collars on the adjacent roller you get a self-cleaning effect. It also says that two rows of star wheels have other advantages which we need not elaborate here.

Dahlmann

17. The Judge described this as follows:

[4] A second well known type of potato separator was the Dahlmann. In contrast to the Rollastar, this machine had rollers with their axes aligned with the direction of flow of the crop rather than transverse to it. The axial rollers were arranged in pairs alongside each other. Each pair of rollers was counter-rotating. One roller in each pair carried a spirally arranged ribbed structure which was designed to operate as a worm or screw and carry the crop axially towards the discharge end. Originally these roller tables were built with bearings at both ends, but this resulted in build up of materials near the bearings at the discharge end. So the tables were modified so that the axial rollers were cantilevered from the input end.

[5] Dahlmann rollers tables were, by the priority date, viewed as superior [to the Rollastar] in dealing with wet conditions.

18. As far as the ckg of the Dahlmann he said that the skilled person would have known:

The details of operation of the Dahlmann machines. The predominant action of the Dahlmann roller was to convey material in the axial direction by the screw action of the ribbed roller. There would be some sideways movement as well. Dahlmann machines incorporated a device which temporarily reversed the direction of the rollers when a large stone was trapped between them in order to

expel it and allow it to move on down the crop path. I shall call this the "Dahlmann reverser mechanism." [17(ii)]

19. The Dahlmann had come on the market in late 1989 but it was common ground that it became widely known shortly thereafter – which is hardly surprising since it was better than the Rollastar in wet conditions.

Other matters of common general knowledge

20. The Judge's findings as to these were ([17]):

iii) The haulm roller. This was a plain cylindrical roller positioned at the end of a web, usually close to and below the end of the web. It was known that if they were placed too high, and in the path of the crop, they would tend to pull the crop through in addition to the haulm: in other words they would be very aggressive.

iv) A variety of devices were in use for sugar beet (as opposed to potatoes) featuring tables of contra-rotating rollers and spiral rollers of more or less even size. The skilled person would be aware of these machines, but would understand that they are designed for more robust types of crop than potatoes.

v) The rollers in separating tables can be adjusted in their construction, position and speed of operation in a wide variety of different ways.

The Acknowledgment of the Prior Art

21. The Patent acknowledges only a single piece of prior art, published as long ago as 1960. It is French patent application 1,288,426, "Spatz". There was some faint criticism both from the Judge and Mr Fernando that neither Rollastar nor Dahlmann were expressly acknowledged as prior art. That was misplaced for two reasons.

22. First, there is no duty on a patentee to acknowledge the cgk. Were it otherwise, every patent would have to be much longer – a kind of textbook. Subject to one minor caveat, the patentee is indeed not as a general rule obliged to acknowledge any piece of prior art at all.

23. That was clearly the position under the old law:

But to say that [the inventor] must also ascertain, under the penalty of his patent being bad, everything that preceded his invention, every approach from every side that persons have made to it, and must correctly indicate the little step which he has made in addition to these, ... would be to require something of him which would be perfectly idle so far as regards utility to the public, and grossly unjust so far as the patentee is concerned. ... If the combination which he has claimed and for which he asks a monopoly, is novel, that is sufficient. There is no obligation to go further and to state why it is novel, or what in it is novel, *per* Fletcher Moulton LJ in *BUSM v Fussell* (1908) 25 RPC 631 at p.652.

24. As far as the modern law is concerned, the fundamental legislation is the European Patent Convention ("the EPC"). It is this which sets the obligations of the inventor as to what he is

to put into his patent and the rules for a patent to be valid. There is nothing in the EPC which says or suggests he is required to say anything at all about the prior art, whether it be a particular item of art or the ckg. The totality of his obligation is set out in Art. 83. It is to "disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art." That is all.

25. True it is that there is some guidance about how a patent should be drafted contained in the Implementing Regulations to the EPC. And that guidance, where it has obviously been followed may have some relevance to how the claims of the patent would be construed; see *Virgin Atlantic v Premium Aircraft Interiors* [2009] EWCA Civ 1062. But failure to comply with the guidance has no effect on validity at all.

26. Rule 27(1)(a) of the Regulations for instance says the "invention should be placed in its setting by specifying the technical field to which it relates." It would be absurd to say the patent was no good if the patentee had not done this.

27. More particularly rule 27(1)(b) says the description shall:

indicate the background art which, as far as known to the applicant, can be regarded as useful for understanding the invention, for drawing up the European search report and for examination, and, preferably, cite the documents reflecting such art.

28. This is all to help smooth and efficient examination. It is not a requirement about validity. And note that the obligation to cite prior art is limited to that which can be regarded as useful for understanding the invention. That art is not necessarily the same as the closest prior art though it generally will be. Nor is it necessarily any part of the ckg.

29. Our second reason for saying the criticism was misplaced is that we think it was perfectly reasonable for the patentee to take the view that Spatz was indeed a useful background for understanding the invention, and indeed more useful than either Rollastar or Dahlmann. True it is that Spatz was a very old, purely paper, proposal. But it does have some similarities to the patented idea and is of some use in explaining the invention. Rollastar is conceptually very different. And whilst Dahlmann could have been used, conceptually it is no closer than Spatz.

The Description of the Patent

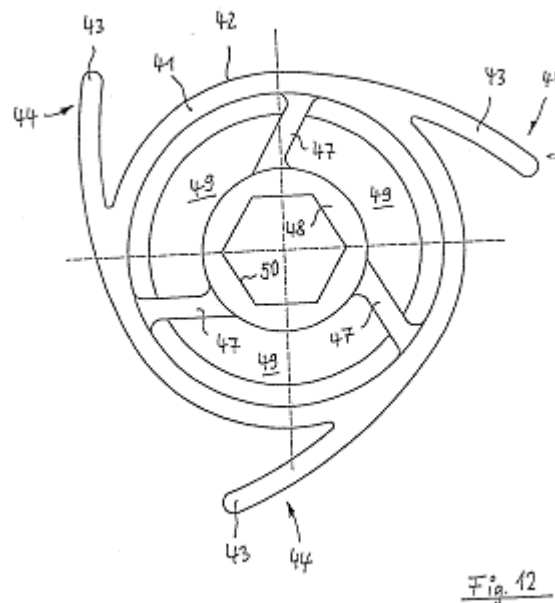
30. The acknowledged Spatz shows a device for removing haulm and other roots from potatoes. The potatoes, after a shaking process to clean them, are carried over pairs of rollers, one of each pair being driven externally and the other being driven by friction with the first roller. One of the pair is flexible. The rollers are of different diameter. The larger roller drives the potatoes forward (though there is gravity assistance because the rollers are inclined downwards) and the smaller roller rotates in the opposite direction. The idea is that the haulm is drawn down between the "nip" of a pair of rollers.

31. The Patent in suit points out that the rollers of Spatz "exert an even feed on the potatoes." The general idea of the invention of the Patent is to depart from even feed. That is why Spatz is not a bad starting point. The departure is achieved by providing on the first roller a "cross-sectional form" which "imparts to the potatoes a temporarily amplified forward feed

by which the separating action is enhanced and the rate of throughput increased." There are other differences from Spatz. Most particularly, unlike the rollers of Spatz the patentee contemplates that each pair of rollers will be independently driven and that both earth and stones as well as haulm will pass down between the rollers – there is an adjustable gap between them and they can be adjusted in height with respect to each other too.

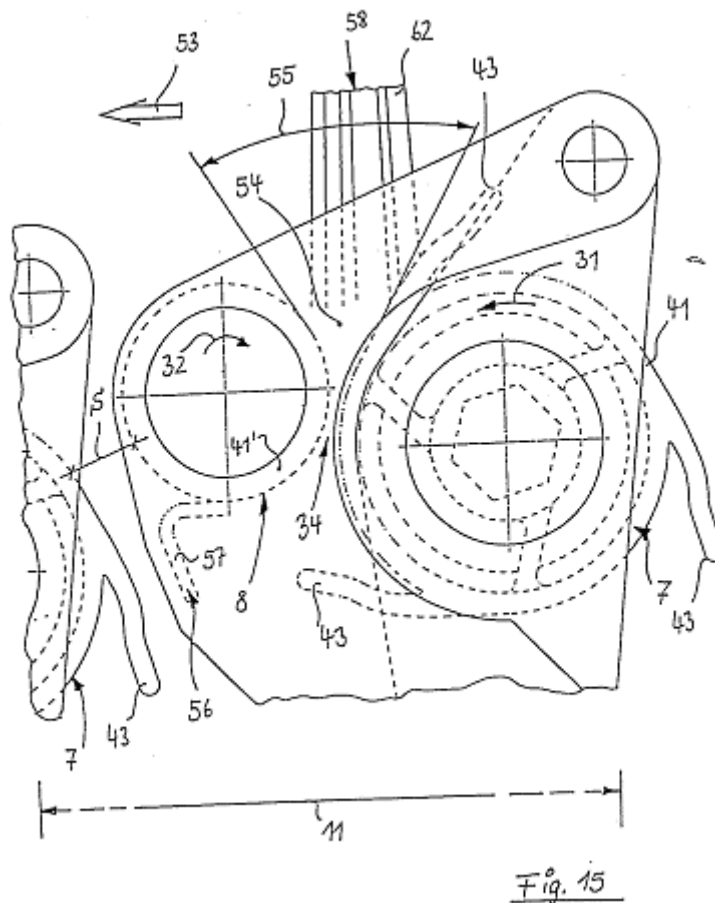
32. We can pick up from here on what the Judge said about the specification:

"[8] The specification goes on to describe a machine in accordance with the invention in considerable detail, much of which is broadly irrelevant for present purposes. In short, a number of pairs of counter-rotating rollers are orientated transversely to the path of the crop. The first roller met by the potatoes carries "extension parts which extend beyond the cylindrical shell part and which are constructed as conveyor lips". This is shown in enlarged form in Figure 12 as follows:



[9] In the embodiment of Figure 12, the shell part 42 is elastically deformable, and is also connected to the hexagonal hub through resilient spokes 47 (in fact the spokes are more like walls as they have axial length, but the specification calls them spokes). This creates what are described as deformation chambers 49, which can be compressed during operation of the rollers. ..

[10] The second roller is shown as not having any projections or lips. It is said, in a passage bridging pages 8-9, that it may be provided with an even layer of elastomer. The operation of the pairs of smooth and lipped rollers is shown in Figure 15:



[11] The specification describes the nip between the rollers, generally indicated at 34, as the "working gap", and the V-shaped gap above this, indicated as 54, as the "gusset". In this gusset, a passage at the top of page 8 explains that the lipped roller imparts an "enhanced delivery feed movement to the potatoes disposed in the gusset" during each rotation. It is also said that the conveyor lips narrow the angle of the V-shaped gusset, and so "exert the intended conveyor pulse on the potatoes in the direction of conveyance". Accompanying clods and haulm are caught in the working gap 34 and ejected downwardly.

[12] The extent to which a separator carries out its task is called its aggressiveness. Too much aggression may cause the potato to be damaged; too little may not clean and separate the potatoes sufficiently. The patent explains at page 9 that the groups of rollers can be varied in their aggressiveness by varying their rotational speeds, either individually or collectively.

Claim 1

33. This reads, broken down into elements, omitting numerals and with an undisputed grammatical correction, as follows:

- (a) An apparatus for separating potatoes from other materials such as earth, clods, stones, weeds or the like, particularly for potato harvesting machines,
- (b) with a number of rolling bodies disposed beside one another on parallel axes,

(c) [forming] rotating groups driven in opposite directions in pairs and which jointly occupy a separating path extending from a material input end to a potato delivery end,

(d) characterised in that whichever is in the direction of the separating path the first rolling body of each group has a cross-sectional form which during each rotation exerts an amplified forward feed at least once on potatoes disposed at the area of intersection between the roller bodies of the group,

(e) and further characterised in that the roller bodies comprise an elastically deformable shell part,

(f) the first roller body of each group is provided on the periphery with at least one conveyor lip, rib or like extension part projecting beyond the contours of the cylindrical shell part.

34. Feature (d) is little indigestible. The Judge re-wrote it in a manner which was not controversial as:

characterised in that ~~whichever is the first rolling body~~ roller of each group in the direction of the separating path ~~the first rolling body of each group~~ has a cross-sectional form which, at least once during each rotation, exerts an amplified forward feed ~~at least once~~ on potatoes disposed at the area of intersection between the rollers of the group

Construction of Claim 1

35. Before the Judge there were quite a number of issues of construction:

i) Whether the claim was limited to an apparatus which had rollers whose axes were transverse to the direction of flow. The Judge rejected what he called a "light" suggestion from Mr Fernando that the claim covered an apparatus, like Dahlmann, in which the roller axes were in the same direction as the flow direction. There is no appeal on this point.

ii) Next, to provide more of a distinction from Rollastar (which in practice had two star wheels before each clod roller), Mr Chacksfield argued that features (b) and (c) required that there be at least two pairs of rollers with no possibility of anything (such as a second star roller) in between. The Judge rejected this proposed limitation. Again there is no appeal.

iii) There was an issue about "amplified forward feed," a feature of element (d). Did this require a "cylindrical potato contacting surface" or was it sufficient that the cross-sectional form of the roller provided discontinuous pushes to the potato at least once per revolution? The Judge held that no such surface was required: it was sufficient to comply with the claim if the cross-sectional area provided a discontinuous push at least once per revolution and that that push would be to a potato in the "gusset." We revert to this point a little later.

iv) Next there was an issue about whether the feature of element (e), that the

"roller bodies comprise an elastically deformable shell part" meant that each roller of a pair had to be elastically deformable? The point mattered because Mr Scott's machine is sold in two variants, one with all rubber rollers and the other in which the first roller of a pair is elastically deformable but the second (clod) roller was of steel. The latter variant would be outside claim 1 (and so all the claims) if Mr Scott were right on this point, as indeed the Judge held. There is no appeal. This made and makes the point about s.60(2) of the Patents Act 1997 live (see below).

v) As to the requirement of element (f), that the first roller body is provided with at least one *conveyor lip, rib or like extension part*, the Judge held that there was no reason why the part "should not be a series of axially short projections." The part was not limited, as contended for Grimme, to projections which were substantially elongated in the axial direction. So the words did not exclude things like the star wheels of the Rollastar. This decision was attacked by Mr Chacksfield.

vi) Mr Chacksfield also raised another point, not expressly addressed by the Judge. This related to the requirement of element (f) that the rib part (we use that as shorthand for *lip, rib or like extension*) should project *beyond the contours of the cylindrical shell part*.

36. Mr Chacksfield submitted that this meant that the rib had to project from the cylindrical surface of the roller. Such was shown, for example, in fig. 12 where the rib extends out of the cylinder. Putting it another way, the *contour* from which the rib had to project had to be in the same plane as the rib itself. Mr Chacksfield pointed to the fact that the Patent concentrated on the "cross-sectional form". Thus it says on p.1 of the translation:

The particular cross-sectional form of whichever are [sic] the first pair of rolling bodies in group imparts to the potatoes a temporarily amplified forward feed.

37. It may be that the Judge did not deal with this point because it did not form part of what was argued or, if it was, was submerged within the mass of other points. Certainly Mr Chacksfield was right to point out that the experts on both sides thought that the star wheels of Rollastar were not themselves within the language of element (f). For instance Mr Mitchell, Mr Scott's expert, when considering obviousness over Rollastar and the Pearson application asserted that the skilled man would consider "replacing the star wheels with a different design with resilient projections, including one based on a resiliently deformable shell." He obviously did not consider that Rollastar already exhibited this aspect of the claim.

38. Now it is true that the court is not bound by the views of the experts as to the meaning of ordinary words in the claim. But it is obviously a strong thing for the court to take a different view from a consensual view of the experts. We think the Judge fell into error here. We must explain why.

39. Firstly, this point is related to and bound up with the "lip, rib or like extension" point. The lip part is to project from the contours of the cylindrical shell. So it must be of a shape which can do just that, thereby informing the reader more about the shape.

40. The point is also linked with the "potato contacting surface" point. The claim and disclosure do not expressly say that the potatoes must come into contact with the surface of the cylinder; they do say that there must be a cylinder from which the ribs project. So, save in extreme cases, there will be such contact. Whilst we do not disagree with the Judge's conclusion on this point, it is not enough that there be ribs which provide enhanced forward feed – they have to project out of a cylinder in cross-section. For we accept Mr Chacksfield's point about the cross-section. The Patent is contemplating a cylindrical roller from which ribs project when seen in cross-section.
41. In argument Mr Chacksfield, following a question from Etherton LJ, sought to get a little further support from claim 15. This requires that the lips "run tangentially into the shell part." The suggestion was that the patentee in the preceding, wider, claims contemplated that the lips came out of the shell part and this limitation was to the angle at which they came out. We were not particularly impressed with this: it is usually a bit of a lawyer's point to construe the main claim by working backwards from a minor subsidiary claim. Besides we are not convinced that the working back leads to a conclusion that the main claim is limited as suggested. So we put this point aside.
42. It is also consistent with the inventor's purpose to read the claim in the narrower sense for which Mr Chacksfield contends. That purpose is to remove mud, stones and haulm by dragging them through the gaps between the ribbed rollers and the clod roller. If you use star wheels of the sort in Rollastar you are not aiming to do that. You are aiming to remove stones and mud by a sieving action. And you are not trying to give the potatoes a kick if they fall into the "gusset", even if a few small ones do fall in and do get a kick if they do.
43. **For these reasons the Judge read claim 1 too widely.** The "lip, rib or like extension". must rise out of the cylindrical portion. To do so it must have axial length and there must be a recognisable cylindrical portion from which it projects. The star wheels separated by collars, whether integral or separate, of Rollastar and Pearson are not covered by the words of the claim. As Mr Chacksfield observed, you only have to look at the Rollastar wheel to conclude that it has neither a lip nor a rib – and a "like extension" hardly fits the bill either because the key purpose of the stars is to carry the potatoes along their tips.

Obviousness over Rollastar and/or Pearson

44. The Judge rejected novelty attacks based on these citations. He appeared to think in this context that there was a difference between Pearson and the actual Rollastar machine. He took the view that the Pearson separating collars were not a "cylindrical shell part" whereas the integral collar portions of the actual Rollastar machine were. We are rather puzzled by that, but it does not matter.
45. The Judge then went on to consider obviousness. Adopting the structured *Pozzoli/Windsurfing* approach ([\[2007\] EWCA Civ 588](#), [2007] FSR 27), he considered the differences between Pearson and the inventive concept of claim 1. He said there were three differences between it and claim 1, namely:

- (a) amplified forward feed;
- (b) cylindrical shell part;

(c) deformable clod roller;

Because he thought that item (b) was not present in Pearson but was present in the Rollastar machine he concentrated on obviousness over the latter.

46. The Judge found as a fact that the Rollastar machine was sufficiently adjustable "so that at least some potatoes would be temporarily in the nip and knocked forward by the rotating stars." However, he also said:

[98] It is clear on the evidence that *in normal operation* of the Rollastar the whole purpose is to cause the potatoes to pass over the clod roller, and to avoid potatoes arriving in the nip, where, if they do so, they are likely to be dragged through with the clods and stones.

47. He rejected the submission that only the normal mode counted because the claim was for a machine, not a method. So he concluded that the only difference between the Rollastar machine and claim 1 was the use of a deformable clod roller (the Rollastar, be it remembered, had a steel clod roller).

48. The question of obviousness for the Judge, therefore, reduced to the question of whether the replacement of the steel clod roller by a deformable clod roller was obvious. He held it was, recording also that the contrary was "not seriously argued."

49. If we had reached the same view on the construction of claim 1 as the Judge, then there would have been nothing in the obviousness appeal. Mr Chacksfield did not contend otherwise. But, he submitted, correctly in our view, that given the narrower construction which we favour, obviousness had to be looked at afresh. The *Biogen* principle of deference by an appeal court (see below) to the multifactorial assessment of a trial judge does not apply.

50. So we must do our own assessment. Starting at *Pozzoli* step 3 the differences between the Rollastar machine and claim 1 are, on our construction of the claim:

- a) ribs having substantial axial length;
- b) a cylindrical shell portion in the same plane as the ribs;
- c) a deformable clod roller.

51. It is apparent to that to go from the Rollastar to claim 1 a series of steps is required. You would have to:

- i) do away with the Rollastar's principal and intended means for removing stones and clods, namely by dropping them between the gaps as the potatoes are jiggled forward on the tops of the star points;
- ii) instead decide that all the extraneous matter (mud, stones and haulm) is to be taken down between a cylinder and the clod roller;
- iii) do away with Rollastar's method of self-cleaning;

iv) extend the fingers of the stars axially so as form ribs of the kind contemplated by the Patent, i.e. such that they provide an amplified forward feed;

(iv) make the clod roller deformable.

52. There is no convincing evidence as to why a skilled person would have seen all this, or indeed why the skilled person would have had any motive to modify the Rollastar in this way. Mr Fernando pointed to some evidence where Mr Mitchell under cross-examination said that changing things (e.g. lip size, spacing and so on) is all part of the "bread and butter" work of a designer of agricultural machinery. This was in the context of a man having the motive of producing an actual machine based on the disclosure of the Patent. Mr Fernando suggested that evidence should be transposed to the context of a man considering modifying the Rollastar machine. We do not buy that. In the former case the man is trying to implement an idea, in the latter there is no need for any "bread and butter" modification at all, still less the conceptual change required.

53. For it must be remembered that the Rollastar when adjusted for normal operation does not even allow potatoes (or at any rate only a few very small potatoes) to fall into the nip. So before the skilled person could even begin to contemplate a device in which significant use is made of the nip, he would have to appreciate that the Rollastar could be adjusted to provide amplified forward feed. Although the Judge found it could be so adjusted, he did not find that those skilled in the art appreciated that fact. We specifically asked whether there was any evidence to that effect and were told there was none. The best Mr Fernando could point to was a photograph in a Rollastar brochure appearing to show a small potato in the nip. The accompanying text says nothing about this, still less that it had any technical value. The brochure was not discussed in evidence. It is miles from establishing that the skilled man recognised that the fate of a few small potatoes in the nip of a Rollastar could be harnessed to make a different sort of machine.

54. Because he had not seen the significance of the Rollastar machine when adjusted abnormally, the skilled man simply would have no motive or reason for even embarking on the path said to be obvious. Claim 1 is not obvious over Rollastar.

Obviousness over Spatz

55. The Judge held claim 1 non-obvious over Spatz. By a respondent's notice Mr Scott attacks that. Since we have construed claim 1 more narrowly than the Judge, if he was right on his wider construction necessarily the claim will be valid on our narrower construction. It follows that the *Biogen* principle applied to this aspect of the appeal.

56. That principle is as follows:

The need for appellate caution in reversing the judge's evaluation of the facts is based upon much more solid grounds than professional courtesy. It is because specific findings of fact, even by the most meticulous judge, are inherently an incomplete statement of the impression which was made upon him by the primary evidence. His expressed findings are always surrounded by a penumbra of imprecision as to emphasis, relative weight, minor qualification and nuance (as Renan said, *la vérité est dans une nuance*), of which time and language do

not permit exact expression, but which may play an important part in the judge's overall evaluation. Where the application of a legal standard such as negligence or obviousness involves no question of principle but is simply a matter of degree, an appellate court should be very cautious in differing from the judge's evaluation. *per* Lord Hoffmann in *Biogen v Medeva* [1997] RPC 1 at p.45.

57. The first question is whether the Judge made any error of principle. The case of obviousness, broadly, is that by the date of the Patent (1993) it was obvious to modify Spatz so as to put ribs on one of the purely cylindrical rollers of Spatz. The error of principle was, suggested Mr Fernando, that the Judge had overlooked that ribbed rollers had become known by 1993 in the shape of ribs on the rollers of beet cleaning machines and on the rollers of the Dahlmann machines.

58. We are far from impressed with this. To get to claim 1 you have to realise that:

i) Spatz, a purely haulm removing device, could be modified so as to remove stones and mud as well as haulm, thus doing away with Spatz's "shaking device".

ii) The stones, haulm and earth can be transported by the rollers alone without the assistance of a pintle belt as shown by Spatz.

iii) Stones and earth can be drawn down between pairs of rollers if they are separated, thus doing away with Spatz's friction driving of one roller by the other.

iv) Ribs should project from one of the rollers so as to impart an amplified forward feed.

59. To say that all this would have been obvious without hindsight to an unimaginative skilled man on the basis of the old proposal of Spatz is quite, quite untenable. That would be so even if Spatz had been a real machine. But as far as anyone knows it was a "mere paper proposal." Patent law has for a long time, and rightly, regarded with particular suspicion arguments based on a suggestion that long disregarded unused proposals render later inventions obvious, see e.g. Blanco White *Patents for Inventions* 4th edn. (1974) at §4-220. The suspicion is particularly strong when the problem solved by the invention of the attacked patent has been longstanding. The case-law of the Boards of Appeal likewise has recognised that the age of a prior proposal must be taken into account in assessing obviousness, see p.216, para. 9.3 of the *Case Law of the Boards of Appeal* 6th Edn. 2010.

60. Do either the ribbed rollers of beet harvesters or of Dahlmann breathe new life to an obviousness case over the ancient Spatz? We think clearly not.

61. As to the beet harvesters, no witness suggested that a skilled man would see that the ribs on the rollers of these could be adapted for potato harvesting. The Judge said the skilled man would understand that beet was more robust than potatoes. Mr Mitchell did not advance a case that it was obvious to modify Spatz by reason of the knowledge that beet harvester rollers used ribs. Mr Fox was not cross-examined on such a basis. The Judge made no error of principle in ignoring them when considering obviousness over Spatz. Indeed, given the evidential position he was right to do so.

62. Turning to the Dahlmann ribs, a key function of these is to advance the whole crop. To get within claim 1 from Spatz the skilled man would have to take all the steps we have set out in relation to Dahlmann save for the last. As to this, he would have to say instead "I will use Dahlmann-like ribs on Spatz-type rollers." The purpose of the ribs would be different – no longer total crop advancing but instead working within the nip to provide amplified forward feed to potatoes within the nip.

63. That is a quite different purpose and we see no reason whatever for that being an obvious step. The Judge rightly disregarded this near hopeless case.

Obviousness over Dahlmann

64. Mr Fernando's last throw was this. He submitted it was obvious to turn the Dahlmann roller system through 90°. If one did that and ensured that the new arrangement provided amplified forward feed one would be within the claim. Since Dahlmann had only been on the market a few years (late 1989) before the date of the Patent there was not much room for the argument "why was it not done before".

65. The Judge rejected this case. He considered each of the points relied upon by Mr Fernando, save for one about a machine introduced some time after November 1993 by a company called Nicholson. That was said to be an error of principle.

66. The evidence about Nicholson was thin indeed. The date of its introduction is far from clear. Mr Chacksfield showed us some evidence to the effect that the Nicholson company was not formed until 1997. It is far from self-evident that the deviser of the Nicholson apparatus got the idea for its machine by simply saying "I will turn Dahlmann round". There is nothing in the Nicholson point.

67. In detail the Judge's reasons for rejecting this case were set out at [111]-[116]. Mr Fernando ran them again here. The Judge ended by saying this of the evidence relied upon to support obviousness:

Although Mr Mitchell stopped short of admitting impossibility, the evidence did not come close to establishing obviousness.

68. That being a conclusion which was clearly open to the Judge, a successful appeal on this point never had even a chance of success.

Conclusion on Validity and Infringement by Mr Scott's machine fitted with an elastomeric clod roller

69. The upshot is that the Patent is wholly valid and Mr Scott's machine sold with elastomeric clod rollers falls within claim 1. Its sale and offering for sale is a direct infringement prohibited by s.60(1) of the Act.

Contributory infringement

70. What then of the other variant, the machines sold with a steel clod roller? As such they do not fall within claim 1. But the machines were designed so that the rollers are interchangeable. Thus those supplied with steel clod rollers can be changed by the ultimate

user (or indeed a middleman) over to rubber rollers. Moreover they were marketed on that basis: Mr Scott said it was:

a selling feature of our machine that you can have rubber and stainless and you can do all these different crops

71. The Judge held that, on those facts, the supply by Mr Scott of steel-rollered Evolution machines was a contributory infringement contrary to s.60(2) of the Patents Act 1977. Mr Scott appeals that decision.

72. Mr Fernando makes a preliminary point (taken so far as we can see only in his post-hearing written submission) that even when fitted with a rubber roller the machine would not necessarily infringe. He suggested there might be a roller switch which did not result in the separator having at least two groups of rollers with one contra-rotating rubber roller. We think nothing of this point – it was not raised at trial and seems inherently improbable. The plain fact is that Mr Scott sold his machine claiming switchability as a virtue.

73. We turn to the law. Section 60(2) and (3) are 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.

74. The Judge's analysis and conclusion on this part of the case was concise. He said:

[61] It is clear that the steel rollers in Evolution machines could be replaced with rubber rollers. This would alter the aggressiveness of the machine. Mr Scott accepted that the machine and its rollers were designed with this in mind. This was one of the things which gave the machine the flexibility which he was striving for. I have no difficulty in finding on the evidence that Mr Scott knew, and that it was obvious to a reasonable person in the circumstances that the machines were both suitable for running with at least two pairs of rubber rollers, and so intended. Infringement is therefore established on this basis.

75. It is said, on behalf of Mr Scott, that the Judge made two key errors in that analysis: (1) the Judge wrongly treated the entire, non-infringing machine, as a "means" for putting the invention into effect; and (2) the Judge ought not to have found contributory infringement in circumstances in which there was no evidence of any specific cases in which steel rollers

were switched by users for rubber rollers. It is said that s.60(2) requires proof that the supplier (Mr Scott) knew that, or the circumstances made it obvious that: the user actually intended to make the switch.

76. Mr Scott's evidence was that it was very rare for machines originally supplied with steel rollers to be switched. Although the Judge held him to be an honest witness we do not see how Mr Scott could know this, given that 90% of his sales were to middlemen and not to ultimate users. Moreover 60% of his sales of spare rollers were of rubber and there was also evidence of a grey market in spares and accessories. The point was not explored any further in the evidence. We do not deprecate that. The extent of switching in the real world is a matter which at this stage is premature: it really arises on an inquiry as to damages. For present purposes, we proceed on the basis that switching sometimes happens. It is hardly surprising that it happens since convertibility was a "selling feature." The presumption must be that Mr Scott enhanced his sales by virtue of that feature.
77. The debate (and exploration in the evidence) before the Judge about s.60(2) was short, not surprisingly given the mass of other issues placed before him. Before us the oral argument was rather fuller. Even then it was not as full as it should have been. Following oral argument we undertook some legal research of our own and the opportunity of asking judicial colleagues in Germany and Holland as to whether they had any case law on the equivalent provisions to s. 60(2). Indeed they had (and an unreported case of Jacob J also emerged). The Dutch Judge told us that his court had even considered the case of a man selling Mr Scott's very machine. We were astonished that the parties, particularly Grimme who were the Dutch plaintiffs, did not tell us about that case.
78. Accordingly we sought further written argument on the point.
79. Advocates should recognise that where a point of patent law of general importance, such as the construction of a provision which by Treaty (either the EPC or the Community Patent Convention) is to be implemented by states parties to those conventions, has been decided by a court, particularly a higher court, of another member state, the decision matters here. For, despite the fact that there is no common ultimate patent court for Europe, it is of obvious importance to all the countries of the European Patent Union or the parties to the Community Patent Convention ("the CPC"), that as far as possible the same legal rules apply across all the countries where the provisions of the Conventions have been implemented. An important decision in one member state may well be of strong persuasive value in all the others, particularly where the judgment contains clear reasoning on the point.
80. Broadly we think the principle in our courts – and indeed that in the courts of other member states - should be to try to follow the reasoning of an important decision in another country. Only if the court of one state is convinced that the reasoning of a court in another member state is erroneous should it depart from a point that has been authoritatively decided there. Increasingly that has become the practice in a number of countries, particularly in the important patent countries of France, Germany, Holland and England and Wales. Nowadays we refer to each other's decisions with a frequency which would have been hardly imaginable even twenty years ago. And we do try to be consistent where possible.
81. The Judges of the patent courts of the various countries of Europe have thereby been able to create some degree of uniformity even though the European Commission and the politicians continue to struggle on the long, long road which one day will give Europe a common patent

court.

Section 60(2) and its origins

82. It is declared in s.130(7) of the 1977 Act that s.60, among other sections, is "so framed as to have, as nearly as practicable, the same effects in the UK as the corresponding provisions of the Community Patent Convention". This preposterous provision in practice means that the UK Act has the same meaning as the corresponding provision of the CPC. The parties were agreed about that. We feel no inhibition in describing the provision as "preposterous." English was and is one of the three authentic texts of the Convention (see Art. 177). No change of language was called for and the change of language only served and serves to confuse.

83. At the time of the 1977 Act the provisions of the CPC of 1975 corresponding to s.60 were Art. 29 (corresponding to s.60(1)) and Art. 30 (corresponding to s.60(2) and (3)). The 1975 CPC failed (never came into force) because it was not ratified by a sufficient number of states. It was revised in 1989 and the infringement provisions, reproduced verbatim from the 1975 version, became Arts. 25 and 26. In passing, we observe that the 1989 revision also failed for the same reason.

84. Section 130(6) of the 1977 Act says that references to, inter alia, the CPC are references "to that convention as amended or supplemented." So we can proceed on the basis that s.60(2) has the same meaning as Art. 26 of the 1989 version. Fortunately we do not have to consider what the position would be if a provision of a Treaty is actually amended without any corresponding change in language of a provision of the UK Act which is "so framed etc." That sort of problem is for another day: it would have been so much easier for everyone if the Act simply said that identified provisions of the relevant Treaties and any amendments of them were henceforth part of UK law. That (without the "any amendment" add on) was the way the Brussels Regulation was implemented.

85. Article 26 is 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.

86. One can see that the draftsman of s.60(2) has added his own immaterial embellishments (e.g. "while the patent is in force" and "licensee or other") but fortunately he has not

changed the crucial wording.

87. The type of infringement described in Art. 26 and s.60(2) is commonly referred to as "indirect" or "contributory" infringement, by way of contrast with "direct" infringement contrary to s.60(1) and Art. 25.
88. Section 60(2) creates a statutory tort, but it does not spring from any previous notional or common law tort. Its distinctive features, by way of contrast with common law tortious claims, are that the tort is actionable (1) even though what is supplied is capable of perfectly lawful, non-infringing use, (2) even though what is supplied never has been and may never in fact be used in a way directly infringing the patent in suit, (3) without any damage being suffered by the patentee, and (4) at the moment of supply, irrespective of anything that may or may not occur afterwards.
89. This marks a distinct contrast with the common law principle that it is not infringement merely to sell an ingredient to another with the knowledge that the purchaser will use it to infringe (*Lavender v Witten* [1979] 5 FSR 59), the refusal of the courts, before the 1977 Act, to order the delivery up of items which could be used in a non-infringing way (*EMI v Lissen* [1937] 54 RPC 5), and the need to show damage for the "so-called" economic torts – such as inducing breach of contract, causing loss by unlawful means and conspiracy (see generally *Clerk & Lindsell on Torts* (19th ed) ch. 25).
90. It also makes the description "contributory" as opposed to "indirect" infringement something of a misnomer. If and to the extent that Mr Scott's case is that there can be no infringement under s.60(2) unless there is actual direct infringement, it is plainly wrong. In this connection it is particularly important to observe that there can even be infringement by "offering" to sell an essential means – at the time of the offer there is unlikely to be any particular end user in mind.
91. The disjunction with the common law is explained by the history of Art. 26. As explained by Benyamini (Amiran Benyamini - *Patent Infringement in the European Community*) it bears the fingerprints of German, French and US laws, but differs from them all in significant respects, and "has established a unique doctrine which cannot be regarded as an adoption of any particular system of law" (§9.1.2).
92. Art. 26 would appear to have its closest connection with US law. The doctrine of contributory infringement has been part of US law for more than 100 years. The specific origin of the term appears to have been s.271 of the US Patent Act 1952, in which it is specifically mentioned. Section 271(c) has marked similarities to Art. 26.1, and is as follows:
- Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practising a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use, shall be liable as a contributory infringer.

Section 271(b) also makes anyone who "actively induces infringement liable as an

infringer."

93. What is immediately noticeable is that those provisions are much more tightly worded and restricted than the corresponding provisions of Art. 26.1. In particular, the words "knowing the same to be especially made or adapted for use in an infringement of such patent" (in the US section) should be compared with "knows .. that these means are suitable and intended for putting that invention into effect" (in Article 26.1).
94. For those reasons, neither the common law nor US law is of direct assistance in resolving any obscurities in the meaning of Art. 26.1 and the corresponding provisions of s.60(2).
95. Both counsel said they had been unable to find any material in the *travaux préparatoires* for Art. 26.1 (thus in effect its predecessor, Art. 30 of the CPC of 1975) which throws any light on the matters of interpretation in issue on this appeal. They were right. The text of Art. 26 is practically exactly the same as the text used as the basis for the Luxembourg Conference on the Community Patent which led to the CPC of 1975 (see Preparatory Document No. 28 of 15th May 1975). The reports of the discussions about this Article do not show any relevant debate about the meaning of the provision.
96. That is as far back as one needs to go – the *travaux* relevant to construction of a Treaty do not include any intention of the actual draftsman who provided the text for the legislators to consider. One only goes to the *travaux* to try to find out what the legislators intended, not what someone else intended. Things would be different if the legislators themselves had the *travaux* of the text which they were considering. Then the intention of the draftsman might come into play – but only because it could be taken as forming part of the intention of the legislators. The intention of the draftsman, however, was not before the legislators of the EPC, and so is irrelevant.
97. As a matter of historical interest only one can go back even further. There was a 1963 draft of a Convention relating a European Patent Law prepared by a committee of representatives of the then six members of the EEC. This contained in Art. 20 two possible variants of a law of infringement. One was to keep infringement law as a purely national matter; the other (called the 1st Variant) set out a code, the distant ancestor of Arts. 25 and 26. The contributory infringement provision read:
- "(2) The proprietor of the patent may also invoke his exclusive right against any other person who supplies or offers to supply an unauthorised person with the means of carrying out a patented process relating to an essential element of the invention:
- when these means are directed solely to carrying out such process or,
- when the other person knows or ought to have known that these means are suitable and intended for carrying out the process."
- Thus although there were changes, the key wording was essentially the same all those years ago. How it came to be drafted (or indeed who did it) we do not know.
98. So it is that we only have the words of Art. 26 and such case-law as there is to resolve the arguments before us.

The "means must be incomplete" submission

99. The first of Mr Fernando's criticisms of the judgment was that the Judge had wrongly concluded that a completed Evolution machine, fitted with steel rollers, was a "means, relating to an essential element of the invention, for putting the invention into effect" within s.60(2). Mr Fernando contended that s.60(2) is only intended to bite on component elements which are supplied in the knowledge that they will be assembled with other elements to work the invention. By contrast, Mr Fernando submitted, a complete, non-infringing machine sold by Mr Scott was not a "means" relating to an element of the invention because it was an entire unit capable of being used as supplied. He submitted that the Judge's interpretation has the consequence that a manufacturer or supplier can be liable for the supply of a non-infringing machine or apparatus simply because there are obvious modifications that could be made by a third party which would make the machine infringing, and that cannot have been intended to be the policy underlying s.60(2).
100. This submission is inconsistent with the judgment (which Jacob LJ had quite forgotten) of Jacob J in the unreported case of *Chapman v McAnulty*, 19th February 1996, British Library ref SRIS C/20/96. It concerned "dollies", the trade term for special mobile carts for carrying a cameraman and his kit in filming situations. The claim of one of the patents said to be infringed required a "receiving tube" into which various types of post could be inserted. The dolly with an open tube was held to infringe. The defendant had a modified version in which a sealed cap was put on the tube. With the cap in place the dolly would not infringe. But the evidence was that a substantial number of ultimate users (the trade term is "grips") would just get the cap drilled through. Section 60(2) infringement was held established, yet if the "whole machine" point was correct, that was a wrong conclusion.
101. It is of course true that the point was not taken in that case, though the defendants were represented by very capable counsel (Mr Colin Birss). That may have been because he did not think of it or because he did but thought it could not succeed. Jacob J did not mention it. So the case is only of slight assistance on the "means essential" point. Such significance as there is that the point was at best not-self evident and at worst not thought worthy of being argued or raised by the Judge.
102. We would not be surprised if it were the latter. For, in our judgment, the Judge was plainly correct on this point. On the facts of the present case, there is no obscurity in the meaning and application of the expression "means, relating to an essential element of the invention, for putting the invention into effect". Grimme's invention is "put into effect" when the Evolution machine is fitted with rubber rollers. The supply of a steel-rollered machine, which is designed and indeed promoted to enable the steel rollers to be changed for rubber rollers, is plainly the supply of the means by which that can be achieved, and is the supply of a means essential for that purpose. The fact that a steel-rollered Evolution machine, so long as it remains steel-rollered, does not infringe and is capable of lawful use as a complete machine in that state is irrelevant. The section is clearly intended to apply to, among other things, products which are perfectly capable of being used in a manner which will not constitute a direct infringement within s.60(1). The requirements as to suitability and knowledge of intended use limit the scope of the statutory tort in relation to such products, not whether the product itself is capable of lawful use without alteration, addition or adaptation.
103. Moreover we can see no rational basis for the "whole machine" point. Why should a device

to which a part can be readily added to make it fall within the claim be a "means essential" but a device from which a part can readily be removed or replaced to make it fall within the claim not be such a means?

104. Accordingly we reject this point.

The requirement of knowledge

105. We turn then to the more difficult problem – what is enough to satisfy the requirement of knowledge? The critical language is that the supplier "knows ... that those means ... are intended to put the invention into effect". The difficulties and complication to which this requirement gives rise were anticipated by the editors of the *Encyclopaedia of United Kingdom and European Patent law*, who comment (in a passage which has all the hallmarks of Mr Thomas Blanco White QC) in para. 2-204:

"Nor is "intended for" any too clear: would it cover, for instance, the case where the infringing use is just one of several, with the vendor neither knowing nor caring what any given purchaser intends the thing for; and would it matter, whether or not the vendor advertised it as capable of the infringing use?"

106. Although the common law is not applicable to resolve the meaning of s. 60(2), the experience of the common law highlights the issues that must be addressed in relation to knowledge and intent. In the context of the economic torts of inducing a breach of contract and of causing loss by unlawful means, the cases have shown the need to consider whether the requirement of knowledge is restricted to actual knowledge or can embrace a conscious decision not to enquire into a fact, or even negligence or gross negligence. It is clearly established that, in the context of those torts, it includes a conscious decision not to enquire but does not include negligence or gross negligence: *OGB v Allan* [2007] UKHL 21, [2008] 1AC 1, at [40]-[41]. So far as concerns intention, the cases have shown the need to distinguish between something which has been "targeted" or "aimed at", in the sense of a specific subjective intention, and recklessness or merely a foreseeable consequence. It is established that nothing other than a specific subjective intention is sufficient for liability: *OBG* at [43] and [46], *Mainstream Properties v Young* [2005] EWCA Civ 861 at [79].

107. Returning to s.60(2) the following questions arise:

i) Whose intention is referred to? The possible candidates are the supplier himself, his direct customer or the ultimate user. Or perhaps no specific person at all – the inquiry being whether the "means" and the circumstances surrounding it being offered or supplied are such that some ultimate users will intend to use or adapt the "means" so as to infringe. We call this the "inherently probable" view.

ii) How specific must the intention be? Must it be a present settled intention at the time of alleged infringement? Or will a contingent future intention do? Here for instance a purchaser of Mr Scott's steel-rollered machine may say to himself: "I know I can change to rubber rollers. That may be handy if in some conditions the metal roller is not aggressive enough".

iii) When must the intention be formed? Must it exist at the time of the supply (or offer to supply) or can it be formed later?

108. First then the person who must have the intention. One can rule out the supplier himself. The required intention is to put the invention into effect. That the supplier himself does not intend to do. The question is what the supplier knows or ought to know about the intention of the person who is in a position to put the invention into effect – the person at the end of the supply chain. Arnold J put it pithily in *KCI Licensing v Smith & Nephew* [2010] EWHC 1487 (Pat) [2010] FSR 740 at [200]:

It is implicit in this reasoning [i.e. that of Lewison J in *Cranway v Playtech* [2009] EWHC 1588 (Pat) [2010] FSR 3] that the relevant intention is not that of the supplier. In my judgment this is correct. S.60(2) makes it clear that there can be infringement not merely if the supplier knows that the means are intended to put the invention into effect, but also if that would be obvious to a reasonable person in the circumstances. That is inconsistent with a requirement of intention on the part of the supplier. Thus the relevant intention must be that of the person supplied.

109. Next, must the required intention be that of the person directly supplied by the alleged infringer? Lewison J took that view in *Cranway*, saying at [156]:

Whether means are *suitable* for putting an invention into effect must be a purely objective test. But whether they are *intended* to put an invention into effect cannot be wholly objective. Only human beings can have intentions, although their intentions may be attributed to other legal persons, according to rules of attribution. Thus this limb of the test must depend on the subjective intention of someone. A supplier of essential means might reasonably be supposed to know what the intention of his immediate counter-party is. But it would be a far stronger thing to expect him to discern the intention of a person far down the supply chain. Moreover, at the time of the supplier's supply of the essential means the person who ultimately forms the intention to use the means to put the invention into effect may not be ascertainable and he may not have formed that intention. It thus seems to me to be more likely that s.60(2) was directed to a supply of essential means to a direct infringer rather than to another secondary infringer

110. We do not agree for two reasons. First, if that view were right, a party who only supplied essential means to middlemen could never fall within the provision. It cannot have been intended that the legislation would not catch a primary supplier to the ultimate market even if he very well knew that the ultimate users would adapt the means so as to infringe.

111. Secondly, the reasoning presupposes an actual, already formed, intention in the user. We do not think that is necessary (see below).

112. What then of the "inherently probable" view? This was essentially that for which Mr Chacksfield argued. He submitted that it was enough if the supplier knew (or it was obvious in the circumstances) at the time of his offer to supply or supply that some (disregarding freak use) ultimate users would intend to use, adapt or alter the "means essential" so as to infringe.

113. Against this view it can be said that Article 26 requires that the alleged infringer must know (or it must be obvious etc) that the means are intended to put the invention into effect.

The present tense is used. So it can be said that a future intention – even a probable future intention - is not enough.

114. Notwithstanding the force of that linguistic point, we conclude that the "inherently probable" view is indeed the correct construction of the provision. We do so for a number of reasons.

115. Firstly, it is the only way to make sense of the fact that the provision not only covers the case where the alleged infringer supplies the means but also the case where he offers to supply it. When a person makes an "offer" the offeree cannot yet have formed a settled intention to put the invention into effect. This consideration played a significant part in the German cases (see below) and we consider rightly so.

116. Secondly, it was essentially the reasoning of Jacob J in *Chapman*. He said:

"It is sufficient if it is shown that the invention will be put into effect by some users. One would only disregard maverick or unlikely uses of the thing."

117. That must, of course, be established in the usual way on a balance of probabilities. It is more accurate, therefore, to state the test in terms of what probably will be intended and what probably will be the use to which the means will be put. This chimes with the German cases (below).

118. Thirdly, it is consistent with "moyens sont ... destinés à cette mise en oeuvre" in the French version of Art. 26.1 and also 'bestimmt' in the German version. Both versions convey the notion of what will happen ultimately rather than a need to look for the intention of a presently identifiable user.

119. Fourthly, the linguistic point does not make any sense looking at Art. 26 and s.60(2) purposively. Those provisions are clearly aimed at people who supply things which will be used to infringe – people who put into circulation "means essential" in circumstances when they know or ought to know that infringement will be the result because the ultimate users will intend to do acts amounting to infringement.

120. Fifthly, that is the effect of the German cases, which, as we have said, should be followed unless we think they are wrong – which we do not.

121. Sixthly, it is the effect of the Dutch case *Grimme v Steenwoorden Constructie* 20th April 2010. We need say no more about this case because the view was taken in *kort geding* (provisional) proceedings only, and the German cases contain a much fuller analysis of the provision.

122. It is to the German cases we now turn. We were shown six. Of these the most recent (in 2006/7) were all from the Supreme Court (BGH as it is generally called) and are clearly the most authoritative. They were *Deckenheizung* [BGH X ZR 153/03], 13 June 2006; *Haubenstretchautomat* [BGH X ZR 173/02], 9 January 2007; and *Pipettensystem* [BGH X ZR 38/06], 27 February 2007. The three earlier cases are *Luftheizgerät*, [BGH X ZR 176/98], 10 October 2000; *DI B.V.* [2004] ENPR 194 of 25 March 1999 (Oberlandsgericht, Düsseldorf); and *Antriebsscheibenaufzug* [BGH X ZR 247/02], 7 June 2005.

123. The leading case is *Deckenheizung*. The patent claimed a room ceiling comprising *inter alia* metal plates and flexible heating/cooling pipes positioned thereon. The patent claim required that the pipes had to be placed 'loosely' on the metal plates. The defendant sold cooling mats which could be placed loosely into such a roof, although with instructions suggesting that they be incorporated into metal cassettes (and therefore not 'loose'). On the facts, however, in about 20% of cases ultimate users placed the mats loosely.

124. Contributory infringement was held established. Necessarily such a conclusion is inconsistent with any requirement that the intention of the individual ultimate user must be known to the defendant at the moment of the alleged infringement. The BGH said this:

[22] ...According to established statute of the senate, the intention of using the protected invention is a circumstance that is within the sphere of the buyer (*Antriebsscheibenaufzug*). However, the condition of indirect patent infringement is not met only when the buyer had already actually decided to use the devices in a patent-infringing manner and the vendor or supplier knew it. Rather, it is met when an intent to use the devices for patent-infringing uses is obvious to a third party based on the circumstances as a legal condition, in other words it must be obvious to the vendor or to suppliers of the devices suitable for use according to the patent. This is meant to facilitate verification of indirect patent infringement. This allows one to consider the condition as being in place when, from the point of view of a third party [the supplier] objectively considering the circumstances, a sufficiently certain expectation exists that the buyer will intend to use the offered or delivered devices for patent-infringing purposes.

125. Whilst it is the intention of the buyer (this must mean ultimate buyer) which matters, a future intention of a future buyer is enough if that is what one would expect in all the circumstances. The BGH went on to explain this more:

[23] The subject matter of the infringing behaviour according to § 10 of the PatG (corresponding to Art. 26) is not participation in the violation by the buyer of the obligations to which it is subject according to patent law, but an actual infringing action by a third party. Accordingly, the senate came to the decision more than once that it is not necessary for direct infringement of the patent by the buyer - either attempted or successful - to occur for an indirect patent infringement to occur, but rather it is sufficient merely for an offer or delivery of suitable devices to have occurred provided that the subjective prerequisites of its intention for use according to the patent are met (citations omitted). In particular, in a legal, unsolicited first offer, an intention for the buyer to use the devices according to the patent will in general not exist in the form of a decision that has already been made. It will also consequently often be lacking objectively, and in any case will appear debatable according to the pertinent state of knowledge of the vendor. According to the nature of this intention as a condition which threatens a patent (citations omitted), the purpose of §10 of the PatG is, in this case as well, to protect the patentee from an impending infringement of its rights. Therefore, the regulation must take effect when it is sufficiently safe to expect, from the point of view of a third party, that the buyer will use the delivered devices in a manner according to the patent.

126. The reasoning based on the fact that provision covers "offering for sale" is a point we noted earlier. It seems unassailable.

127. The BGH went on to flesh out its reasoning further. It in particular considered the position where the alleged contributory infringer has proposed the infringing use (as in the case of Mr Scott). It said:

"24 The features outlined in the law for fleshing out the subjective condition (if one knows or if it is obvious according to the circumstances) thus provide the possibility of establishing the required state of knowledge of the vendor or supplier of the impending infringement of the rights of the patentee through two alternative routes. Either a third party knows that the buyer has intended to use the devices according to the patent, or such an intent is obvious to expect according to the circumstances of the individual case, such as because they are self-evident. Knowledge and obviousness are thus two ways to establish the required high degree of expectation of use of the devices according to the patent. In this light, the necessary high degree of expectation usually exists in particular when the vendor or supplier had itself proposed such use.

128. The last sentence is particularly apposite to the present case. Mr Scott sought to enhance his sales by pointing out that users could adapt the device for less stringent conditions by a simple modification. He sold the means for that too. We do not think it matters that he now says only a few users do make the change (and for the reasons we have indicated we do not think that is at present established). Mr Scott knew that users would intend to make their devices infringing if it suited them and positively encouraged that intention.

129. The BGH took the same approach in *Haubenstretchautomat* and *Luftheizgerät*. In *Haubenstretchautomat* the test was expressed as: "the [third party] expected .. with sufficient certainty that ... (para. 35); and "the impending infringement ... is so clearly apparent that ..." (para. 36). The BGH in that case said that the test was likely to be satisfied "if the supplier indicates or even recommends the possibility of use according to a patent in an owner's manual, operating instructions or similar" (para. 37).

130. In *Luftheizgerät* the test was expressed as: "a high degree of foreseeability in respect of ... the intention" (p. 16). The BGH said that: "If the supplier recommends a particular use to the person supplied, experience suggests that the person supplied will ... put the device to such use, and that the supplier knows this" (p. 15).

131. Although the test is expressed in *Deckenheizung*, *Haubenstretchautomat* and *Luftheizgerät* in slightly different language, they are all to the same effect, and are consistent with what Jacob J said in *Chapman*. In short, the knowledge and intention requirements of Art. 26 and section 60(2) are satisfied if, at the time of supply or offer of supply, the supplier knows, or it is obvious in the circumstances, that ultimate users will intend to put the invention into effect. That is to be proved on the usual standard of balance of probabilities. It is not enough merely that the means are suitable for putting the intention into effect (for that is a separate requirement), but it is likely to be the case where the supplier proposes or recommends or even indicates the possibility of such use in his promotional material.

132. Accordingly, for all these reasons we affirm the Judge's decision as to contributory infringement.

133. That is all that strictly needs to be said at this stage. The case has only got to the point of considering liability; and thus whether or not there was contributory infringement in principle. However, it may be helpful if we express some preliminary views about remedies.
134. First, the form of injunction. Normally, having found infringement of a valid patent, the English court grants an injunction in general terms; it simply restrains the Defendant "from infringing patent No", see *Coflexip v Stolt* [2001] RPC 182. It might be suggested (though Mr Fernando did not in this case) that this practice should be different in the case of contributory infringement where what is sold by the defendant does not itself infringe and has a non-infringing use. The suggestion might be that the court should modify the injunction so as to try to spell out what it is that the defendant can do. We would not have thought that normally appropriate: it will be up to the defendant to work out how to ensure that there is no ultimate infringement. Of course, if he does take reasonable steps but they turn out unexpectedly to be ineffective, enforcement of the injunction by launching proceedings for contempt of court instead of a fresh action for infringement may be inappropriate: see *Multiform v Whitmarly* [1957] RPC 137.
135. The German courts may have a different practice – attempting to tailor the injunction in advance. That sort of merely procedural consideration seems to us to be essentially a matter purely for a national court, which makes its decision in the context of its own national procedural rules and legal culture.
136. As to financial remedies (whether by way of damages or an account of profits), we are strongly inclined to think that the defendants' sales should not be treated in the same way as if they were sales of products which actually infringe. After all the products do not infringe in themselves. Only a proportion may ever be modified so as to infringe and only a proportion of ultimate customers may have bought with any intention (even conditional) to so modify.
137. That raises the difficult question of how quantum (of damages or profits) is to be assessed. It would seem to depend on the degree to which ultimate users adapt or intend to adapt the device so as to infringe. One could simply apply the proportion which is adapted to infringe as the proportion of the defendants' sales which should be treated as infringing. Another view might be that the real question depends on how much the defendant augmented his sales by virtue of his contributory infringement. That would be difficult to assess, but one might as working rule start with the same proportion.
138. Of course, anything we say about how quantum is to be assessed is purely provisional. The point has not even been argued before us. But it may assist in the resolution of any subsequent inquiry.

Unjustified threats

139. In view of our decisions on the other points, there is nothing in Mr Scott's appeal on unjustified threats.

Conclusion

140. For the reasons we have given above, we would allow Grimme's appeal on Claim 1 of the Patent, and would dismiss Mr Scott's Respondent's notice and appeal.

Lord Justice Keene:

141.I agree.