

JOHNSON AND JOHNSON (PROPRIETARY) LIMITED

AND

KIMBERLY-CLARK CORPORATION

AND

KIMBERLY-CLARK OF SOUTH AFRICA  
(PROPRIETARY) LIMITED

IN THE SUPREME COURT OF SOUTH AFRICA  
(APPELLATE DIVISION)

In the matter between:

JOHNSON AND JOHNSON (PROPRIETARY) LIMITED Appellant

AND

KIMBERLY-CLARK CORPORATION First Respondent

AND

KIMBERLY-CLARK OF SOUTH AFRICA  
(PROPRIETARY) LIMITED Second Respondent

CORAM: CORBETT, HOEXTER, HEFER, JJA, GALGUT et  
NICHOLAS, AJJA

HEARD: 4 November 1985

DELIVERED: 27 November 1985

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J U D G M E N T

NICHOLAS, AJA

KIMBERLY.....

KIMBERLY-CLARK CORPORATION ("KIMBERLY-CLARK"), a company incorporated in the United States of America, is the owner of S A Patent No 77/1894. This relates to an invention entitled "Disposable diaper with elastically constricted crotch section". The patent was granted under the Patents Act, 37 of 1952, as a convention application with an effective date of 29 March 1976, being the date of the first application for protection in respect thereof in the United States of America.

With KIMBERLY-CLARK OF SOUTH AFRICA (PROPRIETARY) LIMITED (the South African licensee under the patent) as co-plaintiff, KIMBERLY-CLARK instituted an action in the Court of the Commissioner of Patents against

JOHNSON .....

JOHNSON AND JOHNSON (PROPRIETARY) LIMITED ("J & J"),

alleging that J & J had infringed the plaintiffs'

rights under the patent, and claiming an interdict and

other relief.

J & J denied infringement in its plea

and set up a counterclaim alleging that the patent was

invalid and claiming an order of revocation.

The action was heard by O'DONOVAN J sitting

as Commissioner of Patents. He held that the patent had

been infringed, and that invalidity had not been proved.

He accordingly granted an interdict and other relief, and

dismissed J & J's counterclaim.

An appeal to the Transvaal Provincial Division

was dismissed.

J & J .....

J & J now appeals to this Court under s.

76 of the Patents Act, 57 of 1978.

The specification of Patent No 77/1894 re-  
cites that

"Disposable diapers are generally well known in the art and are becoming increasingly acceptable in the marketplace as a sanitary protection item, especially for use in infant and child care to absorb urine and fecal discharges. Unitary, pre-shaped or prefolded diapers which are generally comprised of a porous facing layer, a fluid impervious backing sheet and a highly absorbent batt sandwiched therebetween, which require no supplementary holders or panties, and which may be disposed of after a single use, have proved to be especially popular. Even though such diapers are growing in popularity,

one .....

one feature which still appears to need improvement is obtaining a better, more satisfactory, fit. In discussing the problem of fit with mothers it was found that, while they wanted a diaper which neatly conformed to the child with a minimum of bulk and a maximum of comfort, what would really be more desirable to them than an aesthetically neat fit would be a diaper which minimized leakage both at the waist and at the crotch or thigh area."

(The word "batt" is not a term of science or art. According to the relevant definition in the Shorter Oxford Dictionary -(s.v. bat, an alternative spelling) - it is "9 A sheet of cotton wadding for quilts: batting", and batting is defined as "2. cotton fibre prepared in sheets for quilts etc.")

The specification states that the absorbent batt may be-

" ... an .....

".... an airformed pad of wood pulp fibres known in the art as fluff. Other absorbent materials, alone or in combination and including webs of carded or airlaid textile fibres, multiple plies of creped cellulose wadding, various super absorbent materials, synthetic foam sheets or the like may also be used."

The specification goes on to deal with prior attempts to improve the fit of disposable diapers and to reduce bulk between the legs, which attempts had not provided an adequate solution. It then sets out a general description of the invention:

"This invention is directed to an improved disposable diaper, in which the absorbent batt in the crotch area is of decreased width as compared to the waist to provide less bulk in the

transverse .....

transverse direction. The diaper is elasticized only along the edges in the narrowed crotch area in a manner to give a more comfortable leg fit as well as improved functional absorbent capacity. Attaching the elastic immediately adjacent to the batt edges and also bonding the batt surface to the backing or facing in that area to unitize the structure forces the batt to contract as the elastic contracts thereby longitudinally condensing the batt and producing gross transverse rugosities in the crotch area whereby an increase in the effective absorbent capacity of the batt in that area is also obtained. Limiting the elasticized edges to the narrowed crotch area foreshortens and provides transverse rugosities in the diaper batt only in the crotch area while minimizing the development of gaps at the waist."

(The Shorter Oxford Dictionary defines rugosity as

"1. ....



"1. The state of being rugose or wrinkled. 2. With a  
and pl. A corrugation or wrinkle ....."

The entry relating to rugose reads: ["-L. rugosus,  
f. ruqa wrinkle; ..... ] Marked by rugae  
or wrinkles: wrinkled, corrugated, ridgy".)

After giving a summary of the invention  
and a description of the drawings and preferred embodi-  
ments, the specification concludes with 15 claims.

Claims 2 to 12 are all dependent on claim 1 which reads:

"1

A disposable, unitary and generally  
elongate diaper having a substantially  
planar waistband section at each end and a

narrow .....

narrow substantially non-planar crotch section disposed between said ends, said diaper comprising a porous facing sheet, a fluid-impervious backing sheet and an absorbent batt disposed between said sheets and secured to at least one of the said sheets in the crotch section, said narrow crotch section being longitudinally constricted by elastically extendible means, one of said means being secured adjacent each edge of said crotch section in a manner which produces a plurality of gross transverse rugosities which extend across the width of the crotch section and which adjoin each other along the length of said crotch section to provide the non-planar crotch section."

Claims 13,14 and 15 are independent claims.

In their particulars of claim the plaintiffs

alleged inter alia:

" 8. ....

"8.

The defendant has, from a date presently unknown to the plaintiffs, made, disposed of and/or offered to dispose of diapers in the Republic of South Africa under the mark 'Panty Nappy' which acts infringe the plaintiffs' rights under Patent No. 77/1894.

9.

In order to prove infringement of the patent, the plaintiffs will rely on the sale by OK Bazaars (1929) Limited of Pritchard Street, Johannesburg, to Thomas Scott of two packs, each containing different sizes of the 'Panty Nappy', being product of the defendant.

10.

A sample of each of the 'Panty Nappy' diapers taken from each of the packs aforesaid is annexed hereto marked 'TS1' and 'TS2'.

11.

The diapers annexed hereto marked

'TS1' .....

'TS1' and 'TS2' fall within the claims of Patent No. 77/1894."

J & J admitted in its plea that it makes, disposes of and offers to dispose of diapers in the Republic of South Africa under the mark "Panty Nappy", but denied that its acts infringed plaintiffs' rights under the patent.

At the pre-trial conference J & J admitted that Annexures "TS1" and "TS2" to the plaintiffs' particulars of claim were examples of the "Panty Nappy" diapers produced and marketed by the defendant.

Invalidity has ceased to be an issue in the appeal. The only matter for consideration by this Court is whether O'DONOVAN J was correct in deciding that claims in the specification had been infringed.

The .....

The determination of the question of infringement involves a two-stage inquiry: firstly, the claims must be properly construed, including the ascertainment of the essential integers; then the infringing article or process must be considered - to constitute infringement the article or process must take each and every one of the essential integers of at least one of the claims. If it does not, there is no infringement. See Rodi &

Wienenberger A G v Henry Showell Ltd 1969 RPC 367 (H.L.).

So far as interpretation is concerned, there are not in claim 1 any technical terms requiring explanation by an expert witness. Although some of the words used may not be generally familiar - like "elongate"

(long .....

(long, slender, tapering), "batt" and "rugosities" -  
all of them are ordinary words which are to be found in  
standard English dictionaries.

The only expression in regard to which there  
was any debate in this Court was "substantially planar".  
It was conceded by counsel for J & J that "planar",  
qualified as it is by the word "substantially", and used  
with reference to the waistband section of a disposable  
diaper, "is not to be understood in claim 1 in its geo-  
metric sense of absolute flatness". The expression  
means "substantially flat or level".

It is clear that the words "planar" and "non-

planar .....

planar" as used in the expressions "substantially planar waistband section at each end" and the "substantially non-planar crotch section disposed between said ends" are used relatively to each other: they involve a contrast between the "planarity", if one may coin the word, of the waistband section at each end of the diaper, and the "non-planarity" of the crotch section disposed between them. In the words of claim 1, the latter section is "longitudinally constricted by elastically extendible means"; the waistband sections are not so constricted. As pointed out in the body of the specification, they "remain substantially flat or planar because of the absence of a tensioned elastic member in those sections".

It .....

It was submitted on behalf of J & J that one is not "entitled to amend the claim with reference to a stray phrase in the body of the specification".

The answer is that the matter is not one of amendment, but of interpretation, and where, as is the case with expressions such as "substantially planar" and "substantially non-planar", expressions in a claim are susceptible of some flexibility in their ordinary connotation, they should be interpreted so as to conform with and not to be inconsistent with or repugnant to the rest of the specification.

(see Gentiruco A.G. v Firestone SA (Pty) Ltd 1972 (1)

SA 589(A) at 615 B).

So interpreted it is clear that "substantially

planar .....



planar" means substantially flat as compared with the substantially non-planar crotch area.

In the second stage of the enquiry, an opinion must be formed on the basis of a comparison of the allegedly infringing article or process with the words of the claim as properly interpreted. The role of the expert witness in this regard falls to be considered.

Although patent cases provide a field in which the expert witness flourishes - a patent action without an expert witness would to-day be almost inconceivable - there is, in regard to admissibility of evidence, no distinction between a patent action and any other action.

The .....

The general rule of the law of evidence is that opinion evidence is inadmissible. But there are exceptions. It is stated in Phipson on Evidence 13th edition, p. 556, that

"At common law .... the opinions of skilled witnesses are admissible wherever the subject is one upon which competency to form an opinion can only be acquired by a course of special study or experience."

(The corresponding sentence in an earlier edition of Phipson was cited as authoritative in R v Smit 1952(3)

SA 447(A) at 451.) Where the expert witness is no better qualified in the particular area to draw inferences than the judicial officer, his evidence is inadmissible.

In .....

In R v Turner (1975) QB 834(CA) LAWTON LJ observed at  
841 that

"An expert's opinion is admissible to furnish the Court with scientific information which is likely to be outside the experience and knowledge of a judge or jury. If on the proven facts the judge or jury can form their own conclusion without help, then the opinion of an expert is unnecessary ....."

(This was cited with approval by LORD WILBERFORCE in  
Director of Public Prosecutions v Jordan (1977) AC 699  
at 718.) Compare FAGAN JA's reference to Wigmore in  
R v Vilbro & Another 1957(3) SA 223(A) at 228 D-E:

"Wigmore deals at length with what he calls the 'opinion rule' in vol. VII, secs. 1917-2028 (3rd ed.). He says of it in sec. 1918: 'It simply endeavours to save time and avoid confusing testimony by  
telling ..

telling the witness: "The tribunal is on this subject in possession of the same materials as yourself; thus, as you can add nothing to our materials for judgment, your further testimony is unnecessary, and merely cumpers the proceedings." It is this living principle which is (or ought to be) applied in each instance; nothing more definite than this is the test involved by the principle." (Vol. VII. p.11.)"

In R v Smit (supra) FAGAN JA said with

reference to Phipson's statement:

"In so n geval dus is die mening van die deskundige in sigself getuienis; die hof mag hom glo of nie glo nie, mag sy mening aanvaar of verwerp (b.v. uit hoofde van sy kwalifikasies of die gebrek daaraan, weens die manier waarop hy sy getuienis aflê, weens bevestiging of ontkenning daarvan deur ander deskundiges); maar sy

posisie...

posisie is tog anders as dié van 'n gewone getuie wat slegs feite vermeld, of van iemand soos 'n handskrif deskundige wat aan die hof leiding gee in die waarneming van feite waarvan die hof self in staat is om gevolgtrekkings te maak."

(The emphasis is in the original.)

As indicated by the learned judge of appeal, there are cases (such as the case of disputed handwriting which he mentioned) where the Court can itself form an opinion, but may be assisted by instruction or guidance from an expert witness. In such cases the evidence of the expert is admissible because "it could be of great assistance" to the Court in reaching its own opinion.

See Coopers (SA) Ltd v Deutsche Gesellschaft für Schädlingsbekämpfung MBH 1976 SA 352(A) at 370 F-H.

The .....

The distinction between the expert as a guide and as an opinion witness is illustrated by the remarks of GREENBERG JA in Annama v Chetty and Others 1946 AD 142 at 155-156, with reference to the handwriting expert:

"His function is to point out similarities or differences in two or more specimens of handwriting and the Court is not entitled to accept his opinion that these similarities or differences exist, but once it has seen for itself the factors to which the expert draws attention, it may accept his opinion in regard to the significance of these factors. Thus, to take an instance relevant to the present case, where the Court sees an absolute identity between two signatures, an expert's opinion as to the unlikelihood of such an identity in two genuine signatures is an opinion by which the Court may be guided. If he is an honest witness

and .....

and has devoted many years to the study of handwriting then his opinion on such a point may well be of assistance to the Court."

With the handwriting expert is to be contrasted the fingerprint expert. It was pointed out by TINDALL JA in

R v Morela 1947(3) SA 147(A) that his evidence is

that of an expert witness. He said at 151-152:

"Mr. Edeling, who presented an able argument before us on behalf of the accused, submitted that a proper comparison reveals that some of the alleged points of similarity are not truly similar and that some of them are actually points of difference. He also argued that a proper comparison reveals numerous points of difference which were not brought to the notice of, or considered by the trial Court. It seems to me that if this Court were to embark on that

comparison .....

comparison it would be ignoring the true nature of the question of evidence which is involved in this aspect of the present case. It was the evidence of an expert witness on a subject in regard to which a person cannot be said to be competent to judge unless he has been through a course of highly specialised training. It is true that in regard to some subjects, on which expert evidence is called, the Court will act on its own opinion arrived at after considering the expert evidence, for instance in the case of evidence in regard to disputed hand-writing; see Annama v. Chetty (1946, A.D. 142, at pp. 154,155). But this is not so where fingerprints are in dispute. No doubt in many cases, particularly where the chance impression is clear, judicial officers or jurymen may be able, with the aid of a magnifying glass, to see and understand some of the alleged similarities or differences. But though this is so, such investigators, being untrained, cannot

justifiably .....



justifiably profess to be competent in all cases to come to a conclusion by means of their own comparisons."

More specifically in regard to patent cases, an expert witness cannot be heard to say whether there has been an infringement by the defendant. In Seed v Higgins (1860) VIII HLC 550 (11 ER 544) LORD CAMPBELL L.C.

said at 551 that the opinion of scientific witnesses

"that one machine is a piracy of the other is of no consequence whatever, for that is a question not in their province to decide."

In Boyd v Horrocks (1892) 9 RPC 77 (H.L.) LORD HERSCHELL

observed in the course of argument that

"The evidence of skilled workmen is much the same as that of handwriting experts; they call attention to par-

ticular ....

ticular things, and then the Court has to consider them itself."

Generally speaking, guidance is the main function of the ex-

pert witness in a patent action. In Parkinson v Simon

(1894) 11 RPC 493 (CA), LORD ESHER M.R. said at 506:

"I have always thought that the value of the expert evidence in such cases as this is, that they can point out to you things which you yourself would not, perhaps, without them, observe in two machines. They point out to you things that you must consider, but as to what their opinion is - whether they consider that the one is an infringement of the other, or whether they consider that the one is bad for want of novelty - I have always thought that is going beyond what they have any right to do, and that their opinion upon that is entirely subservient to the view of

the .....

the tribunal which is trying the case. If you are trying a case before a jury, the proper way to warn the jury against scientific discussions, and scientific opinions, and the pictures which scientific men draw, which are just their opinions and nothing else, is to say: 'Look at them, as far as they are of assistance to you to point out to you the thing which you are to consider, and when you have got that in your minds, just throw your experts over and exercise your own knowledge and sense about it, and decide the matter for yourselves'".

The enquiry in the present case involves a comparison between the Panty Nappy and the words of claim 1, and more specifically an investigation of the question whether that article exhibits all the essential integers of .....

of claim 1.

Numbered for reference purposes, those integers are as follows:

1) .....

- 1) A disposable, unitary and generally elongate diaper;
- 2) Having a substantially planar waistband section at each end and
- 3) A narrow substantially non-planar crotch section between said ends;
- 4) Said diaper comprising a porous facing sheet;
- 5) A fluid-impervious backing sheet;
- 6) And an absorbent batt disposed between said sheets;
- 7) And secured to at least one of the said sheets in the crotch section;
- 8) Said narrow crotch section being longitudinally constricted by elastically extendible means;
- 9) One of the said means being secured adjacent each edge of said crotch section;
- 10) In a manner which produces a plurality of gross transverse rugosities;
- 11) Which extend across the width of the crotch section;
- 12) And which adjoin each other along the length of the said crotch section to provide the non-planar crotch section.

It is common cause that-J & J's Panty Nappy exhibits integers 1,3,4,5,6,7 and 8, and the enquiry is accordingly limited to the remaining integers 2,9,10, 11 and 12.

Mr. Harold Frederick Donnelly was called as an expert witness on behalf of KIMBERLY-CLARK. No evidence, expert or otherwise, was led by J & J.

Donnelly graduated in Chemical Engineering at the University of Toronto in 1947. He then entered the employment of KIMBERLY-CLARK where he has since remained. Since 1966 he has been concerned with the design and development of diapers and their manufacture.

He said in his evidence in chief that the

addressee .....

addressee of the specification was a person skilled in the art of diaper manufacturing and diaper designing. He spoke in general terms about the development of the art of disposable diapers, with particular reference to prior patents relating thereto. He was taken by counsel through the claims said to have been infringed, in the course of which he pointed out the features in the Panty Nappy produced in Court which he said corresponded with the respective integers. He said that the Panty Nappy was a unitary diaper (in comparison with a two-piece diaper system). It was generally elongate. It had a waistband section at each end. Each of these sections was "planar, level or flat, relative to the constricted crotch area .....

area". He pointed out the crotch area, which was narrow compared with the waist area of the diaper. He indicated the "porous facing sheet", and "the fluid-impervious backing sheet", which is a liner on the outside of the diaper made of polyethylene film. In a Panty Nappy of which the front sheet had been cut away, he pointed out the absorbent batt and showed that it was secured to the outer liner. He pointed out how the narrow crotch section was longitudinally (i.e. in the long direction of the diaper) constricted by elastically extendible means on both sides of the absorbent batt. He showed that one of the elastic means was attached to the outer impervious liner at its edge in the crotch section .....



tion. Dealing with integers 10,11 and 12, he said that he found (and he pointed out to the learned Commissioner) large rugosities across the crotch, extending across the full width of the crotch section, and adjoining each other along the length of the crotch section to provide the non-planar crotch section.

Donnelly was cross-examined at length in regard to the presence of the disputed integers, and it was upon the answers that he gave under cross-examination that the argument before us on behalf of J & J was largely based.

To the extent that Donnelly's evidence constituted guidance or assistance to the Court in forming an opinion .....

opinion as to the presence or absence of the disputed integers, it was admissible. But where it was evidence of his own opinion in this regard (whether it was given in chief or under cross-examination) it was inadmissible and must be ignored. Relating the untechnical language of claim 1 to the respective features of the Panty Nappy creates no problem. There is no complexity, either of design or construction, in the patented article involving the study of difficult or esoteric matters of science or mechanics. The Court is well able to determine for itself whether the disputed integers are present in the Panty Nappy.

I now deal in turn with the disputed integers.

Integer .....

Integer 2. Having a substantially planar waistband section at each end.

Counsel for J & J agreed during argument that if the Panty Nappy is laid on a flat surface (as it would normally be prior to application to a baby), the waistband section at each end is substantially planar.

But, he said, J & J's case was that the Panty Nappy was substantially bowl-like or cup-like and that, accordingly, it cannot have a substantially planar waistband section. It is true that when it is placed on a baby the Panty Nappy is cup-like, and it has a cup-like appearance when the waistband sections are joined at their respective ends and the diaper is held with the waist open. But the conclusion is a non sequitur.

However .....

However the diaper is arranged, the fact remains that the waistband section is substantially planar relative to the substantially non-planar crotch section.

Then it was argued that the infringement alleged in the particulars of claim was the sale of the diapers marked "TS1" and "TS2". These diapers had each been folded and they were contained in a cellophane wrapping. Having been folded, the waistband sections were not substantially planar. Consequently the diapers "TS1" and "TS2" did not infringe. For this startling proposition counsel did not rely on any principle of Patent Law. Nor could he, because s. 45(1) of the Patents Acts, 57 of 1978 provides that -

"45(1) .....

"45(1) The effect of a patent shall be to grant to the patentee in the Republic, subject to the provisions of the Act, for the duration of the patent, the right to exclude other persons from making, using, exercising or disposing of the invention, so that he shall have and enjoy the whole profit and advantage accruing by reason of the invention."

Counsel said that the contention was based on the way

infringement had been pleaded in the particulars of

claim. It is true that the plaintiffs relied, in order

to prove infringement, on the sale of two packs of Panty

Nappies. But infringement or not cannot depend on

the fortuitous circumstances of the way in which an other-

wise infringing article is packed for the market.

In .....

In my view, therefore, O'DONOVAN J was correct in holding that integer 2 was to be found in the Panty Nappy.

Integer 9. One of the said means being secured adjacent each edge of the said crotch section.

An inspection of the Panty Nappy reveals that on each side of the crotch section there is secured to the impervious backing sheet an "elastically extendible means". Its position is between the edge of the batt and the outside edge of the crotch section of the diaper.

It was argued that Donnelly's evidence dealt with the distance between the elastic and the batt: he did not deal with the positioning of the elastic in

relation .....

relation to the edge of the crotch section. This, it was submitted, was a matter for expert evidence and, in the absence of such evidence, KIMBERLY-CLARK should not have succeeded.

I do not agree that this was a matter for expert evidence. It is something which is directly perceivable on inspection, which reveals that the elastic is next to the batt on one side of it and next to the edge of the crotch section on the other side. "Adjacent", according to the Shorter Oxford Dictionary, means "Lying near to, adjoining; bordering. (Not necessarily touching)."

The elastic is manifestly adjacent to the edge of the crotch section.

Integer .....

Integer 10. In a manner which produces a plurality of gross transverse rugosities.

Upon inspection there are seen to be a plurality of gross transverse rugosities in the crotch section of the Panty Nappy. It was argued, however, that it had not been proved that the rugosities were caused by the manner in which the elastic was secured, and reliance was placed on an answer by Donnelly given under cross-examination that he did "not know what causes them".

In my view this was not a matter on which Donnelly's opinion was admissible. The case is one where res ipsa loquitur. In a sample of a diaper without elastic secured adjacent to the edges of the crotch section, there are no rugosities; when the elastic in a

Panty .....



Panty Nappy is extended by pulling the ends in opposite directions, the rugosities disappear. Moreover, the mechanism by which rugosities are produced is taught in a passage in the specification which was quoted without criticism by counsel for J & J both in this Court and in the Commissioner's Court:

"When narrow crotch section 20 is constricted by the contracted elastic means at each edge, the crotch section develops a multiplicity of gross transverse rugosities 25. Stated another way, crotch section 20 is reduced in length but still contains the same amount of absorbent material. Accordingly, the absorbent batt in the crotch area is made effectively thicker because of the adjoining hills and valleys of which the transverse rugosities are comprised and therefore

will .....

will have more absorbent capacity per unit area than a batt of the same original thickness has in its initial planar form."

(The figure references are to drawings).

With regard to integers 11 and 12, it is evident on inspection of the Panty Nappy that the rugosities extend across the width of the crotch section, and that they "adjoin each other along the length of the said crotch section to provide the non-planar crotch section".

My conclusion is that the Panty Nappy exhibits all the integers of claim 1, so that it has been established that the claim was infringed. This conclusion makes it unnecessary to consider any of the other claims.

The .....

The appeal is dismissed with costs, including  
the costs of two counsel.

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H C NICHOLAS, AJA

CORBETT, JA  
HOEXTER, JA  
HEFER, JA  
GALGUT, AJA ) Concur