

21 a/85- 21 b/85/AV

IN THE SUPREME COURT OF SOUTH AFRICA(APPELLATE DIVISION)

In the matter between:

ROTAQUE (PROPRIETARY) LIMITED

Appellant

and

GENERAL MINING AND FINANCE CORPORATIONLIMITED

1st Respondent

and

CHAMBER OF MINES OF SOUTH AFRICA

2nd Respondent

CORAM: CORBETT, HOEXTER, VAN HEERDEN, JJA GALGUT et
NICHOLAS, AJJA

HEARD: 9 September 1986

DELIVERED: 25 September 1986

J U D G M E N TNICHOLAS, AJA

These

These two appeals relate to oppositions to the grant of patent applications No 77/2681 and No 77/1224.

In each application the applicant is ROTAQUE (PROPRIETARY) LIMITED ("ROTAQUE") as assignee of the inventor, CORNELIS BROUWER; the title of the invention is "BOTTOM DISCHARGE HOPPER STRUCTURES"; and the opponents are GENERAL MINING AND FINANCE CORPORATION LIMITED ("GENERAL MINING") and CHAMBER OF MINES OF SOUTH AFRICA (together referred to as "the opponents").

The two applications were heard together in the Court of the Commissioner of Patents, "in the sense that one followed immediately after the other". The learned Commissioner decided the applications on a legal point and

refused

refused both with costs. With the consent of the opponents, ROTAQUE now appeals direct to this Court.

The applications commenced under the repealed Patents Act, No 37 of 1952, and in terms of s. 3(2) of the Patents Act, No 57 of 1978, they accordingly fell to be dealt with in accordance with the provisions of the repealed law.

The subject-matter of application No 77/2681 was described by the Commissioner as follows:

"The hoppers of the invention are intended, in the main, for use on gold mines. In practice those hoppers are designed in sizes appropriate to the operations of any particular mine. They are used to convey loose broken rock which results from the mining of a stope (by blasting) to 'ore passes'

which

which in turn lead to the lowest point in the shaft where the broken rock is then loaded into a 'skip' to be transferred to surface and to the reduction works. The manner in which the hoppers discharge their loads is also governed, to a large degree, by the layout of the mine and the size of the rail track used underground.

Hoppers as such were known at the date of the application and have been known for a long time. The scope for invention lay in the precise shape of the hopper; the interaction of its parts; the arrangements made to discharge the hoppers; and similar features. For example a hopper could be designed with two doors and the discharge arranged through the space between the tracks on which the hopper runs. Such a two door arrangement may or may not give rise to problems depending upon the layout of the mine. The shape of the hopper body and the slope of the sides (which can avoid large rocks sticking or bridging across the hopper body) can be both

novel

novel and inventive. The manner in which the discharge is arranged can also leave room for individual invention. It is essential in these matters that the shortest possible time be taken in discharging the contents of hoppers off a train consisting of hoppers when they reach the tip at the ore pass. The necessary arrangements there must be so designed to avoid, for example, causing the hopper to overturn. This is obviously relevant because one arrangement for discharge is the use of a cam on the track which tips or causes the doors to open. Hoppers can be two door hoppers or single door hoppers. The invention in question is for a single door hopper."

The legal point on which the Commissioner decided the applications arose in this way.

One of the grounds of opposition in each of the applications was lack of novelty. In terms of the relevant

part

part of the definition of "new" in s. 1(ix) of Act No 37

of 1952 -

"(ix) 'new', in relation to an invention,
means that, on or before the effective
date of the application for a patent in re-
spect thereof, the invention was not -
(a) known or used in the Union by any-
one other than the applicant or his
agent, or the person or persons
from or through whom such applicant
has derived his right or title (secret
knowledge or secret user otherwise
than on a commercial scale being ex-
cluded);
(b) worked in the Union otherwise than by
way of reasonable technical trial
or experiment by the applicant or any
person or persons from or through
whom such applicant has derived his
right or title;
....."

The opponents alleged that, before the effective

dates

dates of the two applications, the invention had been known and used by mining companies belonging to the GENERAL MINING group. The answer of ROTAQUE was that such knowledge and use was by the mining companies and GENERAL MINING as the agents of ROTAQUE. The riposte of the opponents was that "agent" as used in paragraph (a) of the definition bore the limited meaning of "patent agent" and thus did not include the mining companies.

Counsel on both sides were agreed that if the Commissioner upheld the contention of the opponents, certain of the claims in the specifications were invalid, and the applications could not be granted in their present form.

The Commissioner did uphold the opponents' conten-

tión

tion. As a result he did not find it necessary to consider the other points raised in the Notices of Opposition (all of which were fully argued), and, as stated, he refused the applications with costs.

Having regard to the course of the proceedings in the court a quo, it will be convenient to deal with the legal point in limine.

The primary rule in the construction of statutes is that the language of the legislature should be read in its ordinary sense. And unless there is some ground in the statute itself for limiting or restricting their meaning, general words must receive a general construction.

In its ordinary sense, "agent" is a general word

connoting

connoting one who acts on behalf of another. It must, no doubt, be limited in para (a) to a person employed by the applicant in connection with the invention. But the question remains, is there any warrant in the Act for limiting it to the applicant's patent agent?

On behalf of the opponents, strong reliance was placed on s. 88 of the Act, which provided:

"88. Subject to the provisions of this Act, an agent may on behalf of the person for whom he is agent do any act in connection with an application for a patent under this Act or any proceeding relating thereto: Provided that, except as provided in this Act or with the leave of the commissioner, no person other than a patent agent or a person entitled to act as such shall act as an agent on behalf of any other person."

In

In my opinion s. 88 (which is somewhat convoluted) provides no support for the opponents' contention. The word "agent" is used throughout the section in its ordinary, general sense. It is only in the proviso that reference is made to a patent agent. The proviso does not of course mean that any person other than a patent agent is prohibited generally from acting on behalf of any person. Its effect is that only "a patent agent or a person entitled to act as such" or any other agent "with the leave of the Commissioner" may do any act in connection with an application for a patent under the Act or any proceeding relating to such an application. Thus the provision relating to a patent agent applies solely in the limited field of procedure concerning patent applications:

it

it has no bearing outside that field.

There is no apparent reason why the Legislature should have intended to limit the meaning of "agent" in para (a) in the manner for which the opponents contend.

In the definition of "invention" in s. 6 of the Patents, Designs, Trade Marks and Copyright Act, No 9 of 1916, one of the requisites was that the subject-matter was "not known or used by others in the Union". In Levin v Number Plates and Signs (Pty) Ltd, 1942 CPD 412, DAVIS J considered (at 417-418) the meaning of the expression "known to others", saying -

"These words are very wide, but it is obvious that they must have some limitation placed upon them. For otherwise an inventor would have to work throughout entirely alone, without assistance and without advice. That would be impos-

sible

sible in the case, for instance, of complicated machinery, where it is essential that he should have skilled mechanics to help him. And not only could he have no assistance from mechanics or advice from experts; he could not have a draughtsman to assist with his drawings, and, what is more, he could not even employ a patent agent to help him with his specification or to make application for his patent. For all these persons are, in the wide sense of the term, 'others' to whom his invention becomes known. It is clear law in England - and it was indeed admitted - that, where these persons are in a fiduciary or confidential relationship to the inventor, their acquisition of knowledge of the patent is not publication - see Terrell on Patents (8th Edition), page 89. And I am satisfied that our Act must ex necessitate be construed in the same way."

The learned judge's observations apply a fortiori to the case

of

of an applicant who is an artificial person.

Some organs and officers of a company are not mere servants or agents, but are the directing mind of, and act as, the company. (See, for example, Tesco Supermarkets Ltd v Natrass (1971) 2 All ER 127 (H.L); The Law of South Africa, Vol 4, sec 165). In the daytoday performance of a company's affairs, however, it can act only through servants and agents. If, therefore, "agent" in para (ix)(a) were limited to "patent agent", the result would be that an invention which was the subject of an application for a patent by a company could rarely be "new". That could not have been contemplated by the Legislature. In the light of these considerations, it is inconceivable, in the absence of clear language to that effect, that when the Legislature came to enact the 1952 Patents Act, it could have intended to except only the applicant or his patent agent from the wide words "known or used in the Union by anyone".

In my view, therefore, the Commissioner's inter-

pretation

pretation of para (a) was wrong. It accordingly becomes necessary to consider the other issues which were raised in these oppositions, and it is unfortunate that this Court has not had the benefit of the Commissioner's views on these matters.

I shall deal with the two applications separately, beginning with application No 77/2681 to which was devoted the greater part of the argument on appeal.

PATENT

PATENT APPLICATION No 77/2681

The effective date of this application was 4 May 1977. A complete specification was filed on 24 April 1978, claiming a bottom discharge hopper rail car. It was advertised as open for inspection on 27 December 1978. On 27 March 1979 the opponents filed a Notice of Opposition on the single ground that the invention was obvious. On 15 May 1979 the patent agents acting for the opponents addressed a letter to ROTAQUE's patent agents in which they enclosed a copy of a drawing described as "Rollamatic Engineering Drawing No 330" and stated that hoppers constructed in accordance with the drawing had been used at BUFFELSFONTEIN GOLD MINE and that ROTAQUE was aware of this in July 1975. They advised

advised that they had been instructed to include in the Notice of Opposition the grounds of lack of novelty and material misrepresentation; and stated that unless they were advised within one month that the patent application had been withdrawn, they would proceed without further notice in accordance with their clients' instructions.

Presumably as a result of this letter, ROTAQUE wrote on 28 June 1979 that an amendment to the specification would be sought in terms of a copy of the notice of amendment included in their letter. An application to amend the complete specification was filed on the same date, and this was duly granted. The nature of the amendment appears sufficiently for present purposes from claim 1, which after amendment reads:

"1. A

"1. A bottom discharge hopper rail car comprising a hopper body fixedly mounted on a chassis, (and) a door mounted on the body for pivoting about a first axis, and an arm for displacing the door with respect to the body, the arm being movable by a roller rotatable about a second axis passing substantially through the first axis, when the roller engages a suitable cam track, in use, the body having a pair of downwardly converging, laterally spaced side walls the longitudinally extending lower edges of which define a discharge opening from the body, both side walls sloping and the angle of one side wall with respect to horizontal being different to the angle of the other side wall with respect to horizontal, and the door being displaceable with respect to the body between a position in which it closes said opening and a position in which it is spaced from said opening to permit discharge of the contents of said body."

(By the amendment the word and which had appeared in the

original

original claim was deleted, and the words underlined were inserted.) The effect of the amendment was to narrow the claim by the addition of the feature described in the passage underlined. This feature calls for a specific geometric relationship between an arm which displaces the hopper door and the door pivot. It will, for the sake of brevity, be referred to hereinafter as "the axis feature").

After various amendments, the Notice of Opposition in its final form was filed on 27 March 1979. On 13 February 1980 ROTAQUE filed its Counter-Statement. Both sides filed a number of affidavits in support of their respective contentions.,

The opponents raised three grounds of opposition

to

to the application, namely -

- "A. That the invention claimed in Claims 3, 5 (in so far as it depends on claim 3), 6 (in so far as it depends on claims 3 and 5) and 7 (in so far as it depends on claims 3, 5 and 6) were not new at the effective date of the application, namely the 4th May, 1977.
- B. That the application contains a material misrepresentation.
- C. That the invention is obvious in that it involves no inventive step having regard to what was common knowledge in the art at the effective date of the application."

(Claim 3 is for a "hopper structure comprising a body" and it includes the axis feature).

I shall deal with each of these grounds in turn.

GROUND A - LACK OF NOVELTY

The particulars furnished in support of this ground of opposition were the following:

"Ad Ground A

(1) Prior to the 4th May, 1977, hoppers

falling

falling within the scope of the claims cited in this ground of opposition were in use on West Rand Consolidated Mines Limited (situated at Krugersdorp, South Africa) and were known to personnel on the mine.

(2) The user referred to in paragraph 1 above was not secret user otherwise than on a commercial scale.

(3) The knowledge referred to in paragraph 1 above was not secret knowledge."

(The hoppers referred to in para (1) were referred to in argument as the "Westrand hoppers", which will be described in more detail presently).

Although ROTAQUE in its Counter-Statement denied the allegations in paragraph (1), their correctness may be assumed for present purposes. ROTAQUE's real case was

that

that any knowledge or use such as that alleged was knowledge or use by the Applicant or its agent.

The following facts were not in dispute.

On 29 June 1975 ROLLAMATIC ENGINEERING (PTY) LTD ("ROLLAMATIC"), then a subsidiary of GENERAL MINING, submitted to WEST RAND CONSOLIDATED GOLD MINING COMPANY LIMITED ("W R CONSOLIDATED") a tender for the manufacture and supply of 50 hoppers as shown on a drawing R E 1431 at a price of R1 595,00 each. In August 1976 W R CONSOLIDATED ordered six of these hoppers (being the Westrand hoppers). They arrived at the beginning of November 1976, and were used on the mine in trials and experiments. In the course of these, problems were experienced, more particularly in that the door

did

did not open satisfactorily in order to discharge the hopper's contents, and the hoppers fell over at the location where the door-opening devices were brought into operation. As a result, the hoppers were modified by ROLLAMATIC in November 1976 so as to incorporate the axis feature. Thereafter trials and experiments were continued for several months.

A further eight Westrand hoppers which were purchased and delivered to W R CONSOLIDATED in about February 1977, are of historical interest only and are mentioned for the sake of completeness.

It was common cause that the Westrand hoppers delivered in November 1976 and modified so as to incorporate the axis feature, fell within claim 3 of the amended specification.

L J PRETORIUS, resident engineer at W R CONSOLIDATED

said in his affidavit that problems had initially been experienced with the six Westrand hoppers in November 1976.

After his return to the mine from his annual leave in January 1977 he found on inspection that the hoppers were operating satisfactorily, and he noted that two major alterations had been effected, one of which was the modification to include the axis feature.

In support of its case, ROTAQUE relied on the affidavits of THERON and JOUBERT.

Until his retirement in March 1978, the deponent THERON was employed by GENERAL MINING as a consulting engineer: he was senior manager of its gold and uranium divi-

sion

sion. In 1973 there was conceived the idea of a "cleaning train" (or tunnel cleaning system unit) designed to clean development ends with the distributing unit discharging into each of the hoppers in the train from above. The train was composed of hoppers manufactured by ROLLAMATIC in about August-September 1973. (These hoppers were referred to in argument as "the cleaning train hoppers", and were illustrated in the drawing R E 330.) They were made as a result of an oral request to JOUBERT, who was a director of ROLLAMATIC and the managing director of ROTAQUE, to manufacture these hoppers as experimental hoppers to be tested on behalf of ROLLAMATIC and ROTAQUE through the agency of GENERAL MINING at

one

one or more mines administered by it, which mines included

BUFFELSFONTEIN GOLD MINING COMPANY LIMITED ("BUFFELSFONTEIN")

and W R CONSOLIDATED. The cleaning train hoppers were test-

ed at BUFFELSFONTEIN for a short period with inconclusive

results, after which they were stored until the middle of

1975 when they were again tested at BUFFELSFONTEIN until

August-September 1976. The train was then moved to W R

CONSOLIDATED, where tests were continued. This particular

train and its hoppers never proved reliable. In view of

the unsatisfactory results achieved, THERON and VAN

EMMENIS, the then manager of W R CONSOLIDATED, asked JOUBERT

for his assistance once more. JOUBERT agreed to see what

he could do but asked that he be afforded a reasonable period

of

of technical trial and experiment under mining conditions.

THERON said:

"... it was expressly agreed at that time between myself and Mr. van Emmenis on the one side acting in our aforesaid capacities and Mr. Joubert on the other side, acting for Rollamatic Engineering (Pty) Limited, and ROTAQUE that he, Joubert, would have designed and made the hoppers in question which would then be put on technical trial and experiment for and on behalf of Rollamatic Engineering (Pty) Ltd and ROTAQUE for at least six months under Mining conditions through the agency of General Mining and Finance Corporation Limited or one or more of the mines administered by it and, more particularly, one such mine, i.e. West Rand Consolidated Gold Mining Company Limited. As pointed out above, I consider such a period of six months, or even longer, to be reasonable for the technical trial and experiment involved."

THERON

THERON stated further that thereafter ROLLAMATIC made and supplied hoppers for two cleaning trains (one being the batch supplied in November 1976) for these technical trials and experiments which were carried on well after the six months period. (These hoppers were the Westrand hoppers.)

The affidavit of JOUBERT was along similar lines.

He said in addition that no one at W R CONSOLIDATED or elsewhere was told of the introduction of the axis feature which could not be recognized or appreciated by mere observation but would require careful and accurate measurement to establish its presence. He accordingly denied that the axis feature could be or was "noted" by PRETORIUS as alleged in his affidavit.

This

This evidence of THERON and JOUBERT was disputed in affidavits filed by the opponents, but no application was made for the hearing of oral evidence or for cross-examination of any of the deponents concerned. It was common cause that any real, genuine or bona fide dispute of fact had to be resolved by reference to the onus, which was admittedly on the opponents. In these circumstances a ground of opposition could be upheld only if the facts as stated by ROTAQUE, together with the admitted facts in the opponents' affidavits, justified such an order. Cf. Plascon-Evans Paints v Van Riebeeck Paints, 1984(3) SA 623 (A) at 634-635.

Counsel for the opponents placed emphasis on the fact that the hoppers concerned were purchased by W R CONSOLIDATED from ROTAQUE and paid for in the course of a commercial transaction. That is so, but it is not necessarily inconsistent with the evidence that the hoppers were

acquired

acquired and used by W R CONSOLIDATED in order to perform trials and experiments on ROTAQUE's behalf. JOUBERT said in his affidavit that -

"Although payment was received for the manufacture of the hoppers, it was clearly understood and accepted by all parties to the transaction that they were merely experimental hoppers which were to be subjected to the aforesaid reasonable technical trial and experiment."

Consequently this is not a circumstance which would lead in itself to a rejection of the evidence of THERON and JOUBERT.

(It may be seen that ROLLAMATIC, in manufacturing and selling the Westrand hoppers, "worked" the invention within the meaning of para (b) of the definition of "new". This, however, was not part of the opponents' case and it was not investigated

investigated in these proceedings.)

On the papers, therefore, the knowledge and use of the six Westrand hoppers by W R CONSOLIDATED cannot be regarded as knowledge and use otherwise than by ROTAQUE's agent. In consequence the opponents failed to discharge the onus of proving that novelty was destroyed thereby.

GROUND B - MATERIAL MISREPRESENTATION

In summary, the case for the opponents in relation to this ground was the following: Claims in the specification prior to its amendment had been anticipated before 4 May 1977 in a drawing No R E 330, published by ROLLAMATIC, and by hoppers made in accordance with that drawing (the cleaning train hoppers). At the time patent application No 77/2681 was

was filed, ROTAQUE had knowledge of such publication and use. That notwithstanding, ROTAQUE declared in Patents Form 1 filed in support of the patent application:

"To the best of our knowledge and belief there is no lawful ground of objection to the grant of a patent to us on this application ...". This declaration, it was alleged, was a misrepresentation and was material.

Most of this was disputed by ROTAQUE and its deponents. It is not, however, necessary to go into the disputed matters of fact, because in my opinion once a complete specification has been amended, the court will not investigate matters such as those raised by the opponents.

Counsel for the opponents referred to the decision in Dresser Industries Inc v South African Inventions Develop-

ment

ment Corporation, (1982) 9 BP 317. That was an application in the Court of the Commissioner of Patents for the revocation of a patent. One of the grounds of revocation was that the application for the patent contained a material misrepresentation. In the course of the proceedings an application was made for leave to amend the patent specification. If the proposed amendment were to be made, the statement in the application that was originally false, would become true. The Commissioner of Patents (McEWAN J) said (at 330C-D) that he was not satisfied that that was the proper way to overcome the patentee's difficulty:

"An applicant in patent matters is expected to show the utmost good faith ... and ... it seems to me to be too

late

late to attempt to remedy the situation after an applicant has been caught out in a falsehood."

No doubt a court has a discretion to refuse an amendment to a patent specification which is aimed at curing invalidity on the ground of material misrepresentation. (See Blanco White, Patents for Inventions, 4th ed., pp. 298-299; Terrel on the Law of Patents, 13th ed., p. 221).

That, however, has no bearing on a case such as the present, where the amendment has been granted. Once granted, an amendment is final and cannot be brought into question. It can only be set aside under ss.(10) of s. 51 of the Patents Act, No 57 of 1978, which provides that -

"Any

"Any amendment of a specification made in conflict with the provisions of this section, other than an amendment allowed by the commissioner of a court, may be set aside by the commissioner at any time on application made to him."

(There was no similar provision in Act No 37 of 1952, Cf.

Amalgamated Packaging Industries Ltd v Hutt and Another

1975(4) SA 943 (A)).

The effect of the amendment of the specification is that the amended specification now stands in the place of the specification before amendment, which is of merely historical interest.

Having regard to the amendment, it cannot now be said that "the application contains a material representation" (para (i) of s. 23(1) of Act No 37 of 1952).

It

It was submitted on behalf of the opponents that if an applicant for a patent is guilty of recklessness or mala fides, the court will visit its displeasure upon him by refusing to grant a patent on his application.

Reliance was placed on Willows Francis Pharmaceutical Products Ltd v Aktiebolaget Astra Apotekarnes Kemiska Fabriker,

1960 (3) SA 726 (A) at 738. That case provides no support for such a proposition. What STEYN C J said in the passage cited was that mala fides or recklessness would be circumstances showing that a proposed amendment should not be allowed.

In terms of s. 23 (1) notice of opposition to the grant of a patent might be given "on any of the following grounds and no others". That leaves no room for a claim that the

court

court may refuse a patent application in order to visit its displeasure on the applicant.

The conclusion is that the opponents failed to establish ground of opposition B.

GROUND OF OPPOSITION C - OBVIOUSNESS

As is usual when obviousness is pleaded, no particulars were given of this ground. In its Counter-Statement ROTAQUE denied that the invention was obvious as alleged.

An enquiry into the alleged obviousness of an invention -

"... involves determining, firstly, what the common knowledge in the art was at the effective date of the patent in suit, ...; secondly, whether the invention claimed was a step forward on such common knowledge; thirdly, whether, in the

light

light of such common knowledge that step
was inventive, i.e., not obvious."

Gentiruco A.G. v Firestone S A (Pty) Ltd, 1972(1) SA 588 (A)

at 653 G-H.

The opponents say that the cleaning train hoppers
(i.e., those made in accordance with drawing R E 330
and used in the cleaning train at BUFFELSFONTEIN between
1973 and 1976) were common knowledge in the art. This is
disputed by ROTAQUE, but it may be accepted for the purposes
of the present enquiry.

It may also be accepted for present purposes that before
its amendment, the cleaning train hopper fell within claims
of the specifications. The feature introduced by the amend-
ment by way of limitation into claim 1, namely, the axis

feature

feature, was, it is clear, a step forward on such common knowledge. The question is, whether that step was obvious.

The opponents relied mainly on the affidavit of STANLEY LOUIS CRAIB, the chief consulting mechanical and electrical engineer of GENERAL MINING at the relevant time. He said that as at 4 May 1977, it would have been clear to any person skilled in the art

"...that theoretically the direction of the line of force acting in a roller or a door displacing arm of a bottom discharge hopper having a radial door should preferably be at a right angle to a line passing through the door fulcrum point and the centre of rotation of the wheel and should, moreover, be applied at a point which is the centre of the roller bearing."

Professor ...

Professor Visser of the University of Pretoria, who furnished an affidavit to ROTAQUE, said that this theoretical principle (which he referred to as the Principle of Moments) should be known to any design engineer. He pointed out, however, that the fact that a theoretical principle is known does not make for a practical design. Knowledge of basic theory is a necessary but not a sufficient condition for the production of a successful design. The specific feature involving the direction of the force on the door is one of the contributing factors: the invention claimed does not rest on a single integer but on the totality of several integers combined in such a way as to result in a successful product.

The

The present was not a case of the simple addition of a well-known feature to a known hopper. It was a true combination: the integers interact to produce a common result (See Blanco White, op. cit. p. 119).

The combination was a new one. JOUBERT's evidence was that bottom discharge hoppers known before the production of the new feature had been unsuccessful, more particularly in not properly discharging their contents at the unloading point and in falling over at the location where the door opening devices were brought into operation. Since the introduction of this feature, these defects have been overcome and hundreds of hoppers having the combination of features stipulated in the claim have been used with great

great success.

The opponents also rely on the so-called Goldfields
hoppers. These were hoppers which were made by GOLDFIELDS
ENGINEERING and delivered to W R CONSOLIDATED on 22 December
1976. The opponents say that these hoppers had the axis
feature and that they aroused considerable interest on the
mine.

Professor Visser pointed out that the Goldfields
hoppers were not of the radial door type: its two doors
were of the swinging door type. The theory of moments, he
said, is valid for radial doors, but it cannot be applied to
the swinging doors of the Goldfields hopper.

The use of the feature in the Goldfields hopper did
not, therefore, mean that its use in a hopper having a

radial

radial door was obvious.

The important fact is that as at 4 May 1977, no person skilled in the art had designed a successful bottom delivery hopper having a radial door and incorporating the axis feature. In the circumstances as they appear from the papers, the contention that the combination containing this feature was obvious, would seem to be based on hindsight.

In my opinion this ground of opposition has not been established.

The conclusion is that the opposition to the grant of patent application No 77/2681 stands to be dismissed.

PATENT APPLICATION No 77/1224

The effective date of this application was 1 March 1977. A complete specification was filed on 31 March 1978.

The opposition relates to all of the claims, but it is necessary to set out only claim 1 and claim 10.

"1. A bottom discharge hopper structure comprising a pivotally hung door having an abutment surface, a tipping arm pivotally mounted on the door and also having an abutment surface, the arm having a first position with respect to the door in which first position of the arm said abutment surfaces are spaced apart and a second position with respect to the door in which second position said abutment surfaces are in engagement, a fixed latching element, and a face on said arm which face is in engagement with said latching element while said arm is in its first position with respect to the door, the latching element preventing

pivotal

pivotal movement of the arm and door
about the pivotal mounting of the door
until the arm has been pivoted suf-
ficiently far about its mounting on the
door towards said second position to
take up at least some of the gap which
exists between said abutment surfaces
while the arm is in its first position.

10. In combination, a cam track and a hopper structure as claimed in claim 9, said roller engaging on said cam track as the vehicle moves past the cam track, the axis of rotation of said roller being radial to the axis about which said door pivots and the cam track being profiled so that the line of action of the force exerted by the cam track on said element is always tangential to the arc scribed by said arm and said door about the pivotal mounting of the door."

(Claim 9 is for "a hopper structure as claimed in any preceding claim").

For

For present purposes, the important feature of the hopper structure claimed in claim 1 is the portion underlined, which will be referred to for the sake of brevity as the "latching element". Claim 10 incorporates the "latching element" by reference to claim 9 and the preceding claims; and the axis feature, which is the same as the axis feature claimed in patent application No 77/2681 as amended.

In their final Notice of Opposition, the opponents raised three grounds of opposition, namely

- A That the invention was not new at the effective date of the application, namely the 1st march, 1977.
- B That the application contains a material misrepresentation.
- C That the invention is obvious in that it involves no inventive step having regard to what was common knowledge in the art

at.....

("STILFONTEIN"). (The hoppers concerned
were referred to as "the Stilfontein hoppers".)

They also alleged that -

"(6) Prior to the 1st March 1977, hoppers of the kind illustrated in Rollamatic Engineering (Pty) Limited's drawing no. 1353 dated the 22nd May, 1975 were delivered to Stilfontein Gold Mining Company Limited by Rollamatic Engineering (Pty) Limited in the ordinary course of business for use on the Stilfontein mine."

In regard to claim 1, DIETER GERHARD LÜCK, who
was at the relevant time the development engineer of
GENERAL MINING, described in his affidavit how he came
to apply the clatching means. He said that in the pursuance
of instructions given to him in July 1975, he com-

menced

menced the erection at BUFFELSFONTEIN of the mechanisms necessary for the carrying out of a test procedure in connection with a proposed development and cleaning train.

For the purpose there were allocated to him seven seven-ton single door hoppers of the kind depicted in photographs annexed to his affidavit. During March 1976 the hoppers were taken underground at BUFFELSFONTEIN and trials were carried out on the distributor train between March and May 1976. During the testing it was found that the sudden discharge of some three tons of rock from the distributor train into the hopper below caused the door to open. To avoid this, some sort of locking mechanism was necessary. A fixed latching element, in the form of iron lugs, was accordingly

cordingly welded in position as illustrated in the said photographs. He said that the simple expedient of fixing lugs in positions as shown "provided the obvious answer."

(Dealing with this evidence in his affidavit JOUBERT said that neither he, nor, to his knowledge, anyone then employed by ROLLAMATIC or ROTAQUE had any knowledge of the "latching means" until he inspected the hoppers concerned on 10 September 1980 after the opposition proceedings had been begun. On such inspection he could see from the appearance and quality of the welding that it had not been done by ROLLAMATIC or ROTAQUE.)

LÜCK said that because conditions underground at BUFFELSFONTEIN were somewhat cramped for the conduct of the

the

tests, the entire distributor train (comprising the seven
hoppers and the distributor unit) was moved to W R CONSOLI-
DATED where tests took place on surface with reef taken from
the MONARCH shaft.

On LÜCK's evidence, therefore, cleaning hoppers
which had been modified by the addition of the latching
means were known prior to the effective date of the patent
application.

In their affidavits THERON and JOUBERT repeated
evidence given in their affidavits furnished in connection
with Application No 77/2681. The cleaning train hoppers
were experimental hoppers used by mining companies adminis-
tered by GENERAL MINING as agents for ROTAQUE. Knowledge

and

and use of these hoppers, as modified, was, therefore, protected knowledge and use which did not destroy novelty.

In his affidavit CRAIB, the chief consulting mechanical and mining engineer of GENERAL MINING, joined issue on these points with THERON and JOUBERT. He said that it was the cleaning train concept that was being tested, not the hoppers per se.

This dispute of fact cannot be resolved on the papers. Consequently the opponents cannot be said to have discharged the onus so far as knowledge and use of the cleaning train hoppers by BUFFELSFONTEIN and W R CONSOLIDATED are concerned.

LÜCK said in his affidavit that persons other than ROTAQUE's agents had acquired knowledge of the cleaning train hoppers

hoppers, namely, personnel of GENERAL MINING and BUFFELSFON-
TEIN "of different professional callings and scientific
disciplines who, I believe, would in turn have dissem-
inated the information to others involved in the industry;
the Inspector of Mines for the Klerksdorp area; an assort-
ment of visitors both from South Africa and from abroad;
and members of the contracting firms connected with the
development."

I do not think that this sort of circumstantial
evidence is sufficient to prove that one or more of the
persons referred to had the requisite knowledge. What had
to be shown was that all of the integers of the hoppers
claimed were known prior to the effective date. Proof of
opportunity

opportunity to know is not enough. In this regard, it is not without significance that no affidavit has been submitted from any person (and on LÜCK's showing there should have many such) who acquired knowledge of the invention at the time and on the occasions to which LÜCK deposes.

My conclusion is that the opponents did not establish that the invention claimed in claim 1 was known or used prior to the effective date by anyone other than the applicant or its agents.

In regard to claim 10, the opponents relied on the so-called Stilfontein hoppers, which were illustrated in ROLLAMATIC's drawing No R E 1353. One hundred of these six-ton bottom discharge hoppers were purchased from ROLLAMATIC and delivered to STILFONTEIN before the effective date

of

of the patent. The evidence for the opponents was that these hoppers had both the latching element and the axis feature.

JOUBERT said that the Stilfontein hoppers were two door hoppers and were therefore completely different from the single door hopper claimed in the patent. The opponents sought to answer this by saying that "there is nothing in the claims of the patent to limit its ambit to a single door", and that the Stilfontein hoppers do indeed consist inter alia of "a bottom discharge hopper structure comprising a pivotally hung door ..."

In regard to the first point, I do not agree that the patent does not claim a single door as an essential

integer

integer. It claims in claim 1

"A bottom discharge hopper structure
comprising a pivotally hung door ...
a tipping arm pivotally mounted on the
door ... the arm having a first posi-
tion with respect to the door ..."

and so on. That cannot be interpreted as a claim to more
than one door.

Drawing No 1353 shows clearly that the Stilfontein
hopper has two doors and two tipping arms.

I understood counsel for the opponents to argue
that this hopper does have a pivotally hung door, and that
the fact that it has the additional feature of a second
pivotally hung door, does not mean that it does not antici-
pate the invention claimed. I do not agree. In a bottom

discharge

discharge hopper, it is of primary importance that there be a means of closing and opening the discharge aperture.

A Stilfontein hopper with one door would not have such means. It is not the case that the Stilfontein hopper has an additional feature: the two door means of closing and opening is a different feature from the single door means claimed.

In my opinion, therefore, lack of novelty was not established.

GROUND B - MATERIAL MISREPRESENTATION

The foundation of this ground of opposition is the lack of novelty alleged in ground A. The opponents

contend

contend that ROTAQUE must have been aware of invalidity on that ground, and that it was guilty of material misrepresentation in declaring in the application that to the best of its knowledge and belief there was no lawful ground of objection to the grant to it of a patent on this application.

The purpose of alleging this ground of opposition is obscure. Certainly nothing could be achieved by it. If the ground of lack of novelty failed, this ground would fall with it; if it succeeded, it would be unnecessary to consider this ground.

In the event the ground of lack of novelty has failed.

GROUND C - OBVIOUSNESS

In

In respect of this ground the evidence was directed to the axis and the latching element features.

For the reasons given in connection with patent application No 77/2681 the axis feature had not been shown to have been obvious.

In regard to the latching element, the opponents relied on the evidence of LÜCK above referred to, and also on the evidence of McMILLAN, who said in his affidavit that this feature was present in the Stilfontein hoppers.

In his affidavit, JOUBERT denied that the latching element was common knowledge in the art as at 1 March 1977.

LÜCK

LÜCK said that he considered that the use of the latching element was a simple expedient and that it provided the obvious answer to the known problem. JOUBERT pointed out, however, that neither LÜCK himself, nor CRAIB, nor PRETORIUS asked ROLLAMATIC to make this modification to the two sets of six and seven Westrand hoppers delivered at the end of 1976, and the first part of 1977. There is force in JOUBERT's argument that it is clear from the omission that it was not obvious to persons in the art to incorporate this element in such hoppers before or at 1 March 1977. Nor do I think that it was proved that the use of the latching element on the Stilfontein hoppers meant that it was common knowledge in the art.

This

This ground of opposition fails.

The opposition to the grant of patent application

No 77/1224 stands to be dismissed.

ORDER

1. (a) The appeal in respect of Patent Application No

77/2681 is upheld with costs, including the costs

of two counsel.

(b) The order of the Commissioner of Patents is set

aside and there is substituted therefore -

"The opposition is dismissed and the application

for a patent is granted with costs on the Supreme

Court scale."

2. (a) The appeal in respect of Patent Application No

77/1224

77/1224 is upheld with costs, including the costs
of two counsel.

(b) The order of the Commissioner of Patents is set
aside and there is substituted therefor -

"The opposition is dismissed and the application
for a patent is granted with costs on the Supreme
Court scale."

H C NICHOLAS, AJA

CORBETT, JA	} Concur
HOEXTER, JA	
VAN HEERDEN, JA	
GALGUT, AJA	