THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

JUDGMENT

Case No: 872/12
Reportable

In the matter between:

I O TECH MANUFACTURING (PTY) LTD	**FIRST APPELLANT**
NEMTEK (PTY) LTD	**SECOND APPELLANT**
NEMTEK CONTRACTING (PTY) LTD	**THIRD APPELLANT**

and

GALLAGHER GROUP LTD	**FIRST RESPONDENT**
GALLAGHER POWER FENCE (SA) (PTY) LTD	**SECOND RESPONDENT**

Neutral citation: *I O Tech Manufacturing (Pty) Ltd v Gallagher Group Ltd* (872/12) [2013] ZASCA 180 (29 November 2013)

Coram: Navsa ADP, Ponnan and Bosielo JJA and Van der Merwe and Swain AJJA

Heard: **18 November 2013**

Delivered: **29 November 2013**

Summary: Patent – infringement not proven – documentary evidence inadmissible – purported expert evidence of no probative value – in any event not all essential integers of the claims of the patent proved to have been taken.

ORDER

On appeal from: The Court of the Commissioner of Patents (Legodi J):

1 The appeal is upheld with costs, including the costs of two counsel where so employed, but excluding twenty per cent of the costs relating to the preparation of the record of appeal.

2 The order of the court a quo is set aside and replaced with the following:

'The plaintiffs' claim is dismissed with costs.'

JUDGMENT

Van der Merwe AJA (Navsa ADP, Ponnan and Bosielo JJA and Swain AJA):

[1] The first respondent, Gallagher Group Ltd, is the proprietor of South African Patent no 96/6799 entitled 'Safety Operation for a Security Device' (the patent). The second respondent, Gallagher Power Fence (SA) (Pty) Ltd, is the holder of an exclusive licence granted by the first respondent under the patent for the territory of Southern Africa. The first appellant, I O Tech Manufacturing (Pty) Ltd, primarily manufactures energisers for use in the electrification of security fences. According to their plea, the second appellant, Nemtek (Pty) Ltd, and the third appellant, Nemtek Contracting (Pty) Ltd, sell energisers for this purpose.

[2] The respondents instituted a patent infringement action against the appellants in the Court of the Commissioner of Patents, relying on direct and indirect infringement of the patent by the appellants. The appellants counterclaimed for revocation of the patent, but at their instance the counterclaim was postponed sine die. Consequently only the issue of infringement had to be determined at the hearing of the action. The Commissioner (Legodi J) granted the interdictory relief claimed by the respondents and ordered delivery up of infringing articles in rather unclear

terms, deferment of an inquiry into damages and payment of costs, including the costs of two counsel, by all three appellants. Leave to appeal was granted by this court.

[3] The issue is whether the respondents proved direct infringement of the patent by the appellants. In this regard s 45(1) of the Patents Act 57 of 1978 provides as follows:

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

[4] The test for infringement under s 45(1) was authoritatively stated as follows in *Johnson & Johnson (Proprietary) Limited v Kimberly-Clark Corporation and Kimberly-Clark of South Africa (Proprietary) Limited* 1985 BP 126 (A) at 130G-131B:

'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.'

And this court has on more than one occasion cited the following statement of Diplock LJ in *Rodi & Wienenberger A G v Henry Showell Ltd* 1966 RPC 441 (CA) at 467 with approval:

'If the language which the patentee has used in the claims which follow the description upon its true construction specifies a number of elements or integers acting in a particular relation to one another as constituting the essential features of his claim, the monopoly which he obtains is for that specified combination of elements or integers so acting in relation to one another ─ and for nothing else. There is no infringement of his monopoly unless each and every one of such elements is present in the process or article which is alleged to infringe his patent and such elements also act in relation to one another in the manner claimed.'

See *Raubenheimer & another v Kreepy Krauly (Pty) Ltd & another* 1987 (2) SA 650 (A) at 656I-657A and *Camworth Technologies Ltd v Videx Wire*

Products (Pty) Ltd t/a Videx Mining Products (702/12) [2013] ZASCA 112 (17 September 2013).

[5] The specification of the patent describes the background art and the nature of the invention. It states that it is common in security systems to have a number of electric fence energisers operating on different conductive lines which combine to form a perimeter fence. Safety regulations have over the years been enacted which limit the frequency and magnitude of energy pulses that can be delivered by electric fence energisers. This is to ensure that if a person or animal touches or falls against the fence and for whatever reason remains there, the electrical energy received by that person or animal is unlikely to permanently damage them. When security electric fence systems have two or more energisers, a problem can occur where at a junction between the conductive lines a person can receive a pulse having a greater magnitude than generated singly by an energiser. A junction in this context means any region where a person or animal can simultaneously touch conductive lines connected to separate electric fence energisers. The solution to this problem offered by the invention of the patent is that if the operation of the energisers are co-ordinated with each other, the effective pulses on the electric fence will at all times be regulated and thus fall within the safety regulations or whatever parameters are desired by the operator or designer of the security system. It is stated in the specification that the electronics of timing the pulses of electric fence energisers are not accurate enough to ensure that energisers firing independently in a co-ordinated pattern will continue doing so over a period of time. The invention provides a means of communication which ensures that the firing of the energisers is co-ordinated. With the invention co-ordinated firing between energisers ensures that there will be the same timed difference between all pulses on a fence at the junctions, thus eliminating the chance of a greater magnitude shock.

[6] The patent comprises four claims. In the court a quo the respondents relied only on claims 1 and 2 thereof. It is common cause that the integers of claims 1 and 2 are as follows:

	Claim 1
	A method of transmitting energy pulses on a conductive system where such a system includes:
(i)	- two or more conductive lines
(ii)	- one or more pulse generators capable of transmitting an energy pulse along each conductive line, and
(iii)	- junction points where the conductive lines are in close physical proximity to each other
(iv)	- the method is characterised by the step of:
(a)	- co-ordinating the operation of the energy pulse generators to ensure that the effective pulses in the vicinity of a junction point of a conductive line are within a predetermined
(1)	- pulse rate and
(2)	- magnitude range
(v)	- whereby pulse production is co-ordinated with a timing means included in each generator, wherein the timing means determines at what times pulses are produced by a pulse generator, and
(vi)	- wherein there is provided a central control unit capable of transmitting a synchronisation signal to each pulse generator, said synchronisation signal acting to reset the timing means associated with each pulse generator
	Claim 2 (as above, plus)
(vii)	- said pulse generators operating independently until said timing means receive a further synchronisation signal to reset them.

[7] A pulse generator is also referred to as an energiser. The parties are agreed that these integers are all essential integers. I therefore agree with the appellants that the invention comprises a combination of physical components and method steps, acting in a particular relation to one another, which constitute the essential features of the claims.

[8] It is common cause that the first appellant manufactures and the second appellant sells the Merlin Stealth model M25S master and slave energisers (the Merlin energisers). The Merlin energisers were the central

focus of the respondents' case in the court a quo. The respondents' case rested on documentation allegedly pertaining to the Merlin energisers and tests performed on them by Mr J T Raubenheimer, the only witness for the respondents at the trial. The appellants closed their case without adducing any evidence.

[9] Despite the fact that in evidence Mr Raubenheimer was asked to simply read portions of documents alleged to pertain to the Merlin energisers into the record, the respondents and the court a quo relied on the truth of the contents of those documents. Before us the respondents relied solely on alleged Merlin energiser user manuals and it is therefore only necessary to deal with them. Mr Raubenheimer testified that these manuals were obtained by him when he purchased a set of Merlin master and slave energisers but that he may have downloaded some of the manuals from the internet. On either basis the manuals were inadmissible as evidence because their authenticity had not been proved. The Merlin energiser master and slave set was purchased by Mr Raubenheimer from Unitrade 558 (Pty) Ltd t/a Nemtek Security Warehouse (Unitrade). There is no evidence of any connection between Unitrade and any of the appellants. And to simply say that a document was downloaded from the internet clearly does not prove that the document is what it purports to be. As the respondents provided no proof that the manuals originated from any of the appellants, the question as to the probative value of the contents thereof, if any, did not arise.

[10] That leaves for consideration the evidence of Mr Raubenheimer. He testified that on 10 March 2011 he performed certain tests on the Merlin master and slave energisers that he purchased from Unitrade. The tests were performed with the use of an oscilloscope. An oscilloscope is capable of visualising the electric pulses produced by energisers. According to Mr Raubenheimer, the tests demonstrated that the Merlin master and slave energisers each has its own timer which determines at what times pulses are generated by that energiser and that these pulses drift apart until the respective timers are re-synchronised. His opinion was that the tests made it clear that a synchronisation signal was transmitted between the master

energiser, acting as the central control unit, and the slave energiser and that the signal acted to reset the timer associated with each pulse generator.

[11] For the reasons that follow, reliance on the evidence of Mr Raubenheimer to prove infringement of the patent by the appellants is in my judgement flawed in a number of respects, each fatal to the case of the respondents. First, the evidence of Mr Raubenheimer is of virtually no probative value in the circumstances. Second, even if regard is had to his evidence, it does not remotely prove that all the integers of claims 1 or 2 of the patent were taken and in fact indicates that important integers were not taken.

[12] It is trite that the basis for the admission of the opinion of an expert is his or her special knowledge and skill in respect of a particular subject. Although Mr Raubenheimer qualified as an electrical engineer, he only completed the second appellant's introductory course in respect of the installation of electric security fences on 19 February 2011. The course lasted one day. He only ever installed single energiser electric fences. He performed the tests in question on 10 March 2011. At the time he had no prior experience in the testing of energisers at all or in the testing of energisers with an oscilloscope. In the circumstances Mr Raubenheimer can hardly be said to have acquired special knowledge and skill in respect of the subject matter of claims 1 and 2 of the patent. It follows that the opinion evidence adduced by him was not admissible. Moreover, the oscilloscope used by Mr Raubenheimer was provided to him by a laboratory. He did not obtain a calibration certificate for the oscilloscope. He was not concerned about that and although that was the first time that he, on his own version, used an oscilloscope for this purpose, he was satisfied that the oscilloscope was '. . . more or less doing the right thing', despite the fact that an oscilloscope is a precision instrument. A certificate of calibration dated 1 February 2012 was produced at the trial, but there is no evidence that it relates to the oscilloscope used by Mr Raubenheimer or that it was valid for the date of the tests. It follows, in any event, that no reliance could be placed on the results of the tests performed with the use of the oscilloscope.

[13] At the very best for the respondents, the Merlin master and slave energisers could be used as components in the method of claims 1 or 2 of the patent, as could other energisers available on the market. But even on this basis, it is clear that integers (i) and (iii) were not taken. In addition, integer (iv)(a)(2) provides that the method is characterised by the step of co-ordinating the operation of the energy pulse generators to ensure that the effective pulses in the vicinity of a junction point on a conductive line are within a predetermined magnitude range. Mr Raubenheimer testified that he did not test the magnitude range of the energy pulses. He therefore did not provide evidence that in the operation of the master and slave energisers, as observed by him, effective pulses were kept within a predetermined magnitude range because of the co-ordination of the pulse generators. Integer (iv) was thus also not proved to have been taken.

[14] It was the evidence of Mr Raubenheimer that in the tests performed by him the synchronisation signal of the Merlin master energiser, acting as the central control unit, most probably reset the timing means of both the slave energiser and the master energiser, '. . . because there was a distinctive no pulsing'. This is in accordance with the summary of his expert evidence referred to in para 10 above. This is contrary to integer (vi), which requires that the synchronisation signal transmitted by the central control unit acts to reset the timing means within each pulse generator on the conductive lines, that is, without resetting a timer of the central control unit.

[15] Integer (vii) requires that each pulse generator operate independently until it is reset by a further synchronisation signal. Mr Raubenheimer's evidence was that in the absence of a synchronisation signal, the voltage of the pulses of the slave energiser dropped. It therefore does not operate independently of the master energiser in the absence of a synchronisation signal. Thus the Merlin energisers do not have the feature set out in integer (vii).

[16] It follows that the court a quo erred in finding that the respondents proved direct infringement of the patent. Counsel for the respondents fairly

conceded that no case was made for indirect infringement. The appeal must therefore succeed.

[17] The record of appeal is burdened with unnecessary material, such as expert summaries of witnesses not called and duplications of the judgment of the court a quo and the patent specification. In addition, many of the cross-references in the record are confusing or wrong. As a mark of this court's disapproval of the careless preparation of the record, I propose to disallow twenty per cent of the appellants' costs relating to the preparation of the record of the appeal.

[18] In the result the following order is issued:

1 The appeal is upheld with costs, including the costs of two counsel where so employed, but excluding twenty per cent of the costs relating to the preparation of the record of appeal.

2 The order of the court a quo is set aside and replaced with the following:

'The plaintiffs' claim is dismissed with costs.'

C H G VAN DER MERWE
ACTING JUDGE OF APPEAL

APPEARANCES:

For Appellant:	A J Bester SC (with him G Marriott) Instructed by: Rademeyer Attorneys, Randburg Honey Attorneys, Bloemfontein
For Respondent:	R Michau SC (with him D Hugo) Instructed by: Hahn & Hahn Inc, Pretoria McIntyre & Van der Post, Bloemfontein