

Murray v Vodacom (Pty) Ltd and another
[2009] 1 All SA 381 (T)

Division: TRANSVAAL PROVINCIAL DIVISION
Date: 21 May 2008
Case No: 2002/1924
Before: JR MURPHY J
Sourced by: M Snyman and D Cloete
Summarised by: DPC Harris

. [Editor's Summary](#) . [Cases Referred to](#) . [Judgment](#) .

[1] Intellectual property law - Patents - Infringement of patent - Plaintiff bears onus of proving infringement - Whether or not a plaintiff has proved an infringement of his patent turns upon a comparison between the article or process, involved in the alleged infringement and the words of the claims in the patent.

[2] Intellectual property law - Patents - Validity - An invention is only patentable if it involves an inventive step and does not form part of the state of the art immediately before the registration of the patent.

Editor's Summary

In an action before the Court of the Commissioner of Patents, the plaintiff sought an interdict restraining the defendants from infringing or aiding and abetting the infringement of a patent of which he was the proprietor.

The defendants denied that they had infringed the plaintiff's patent through use of the plaintiff's invention in their products or services, and claimed further that the patent was invalid for lack of novelty and for being obvious.

Held - [Section 45\(1\)](#) of the Patents Act [57 of 1978](#) ("the Act") provides that the effect of a patent is to grant the patentee, 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 defined in the claims of the patent, so that he will enjoy the whole profit and advantage accruing by reason of the invention.

In order to decide whether the defendants' products and services infringed the patent, the Court had to determine what the essential features of the claims of the patent were. If all the essential features of the claim were present in the targeted products of the respondents, the conclusion would be that the patent was infringed. In other words, whether or not a plaintiff has proved an infringement of his patent turns upon a comparison between the article or process, involved in the alleged infringement and the words of the claims in the patent.

The onus was on the plaintiff to prove infringement. The Court set out the correct approach to interpreting a patent for the purposes of determining infringement or invalidity. It pointed out that our law of interpretation has moved beyond an overly literalist approach.

In this case, the plaintiff was unable to discharge the onus resting upon him, and the action based on infringement was dismissed.

The next issue addressed by the Court was the defendants' claim of invalidity. In that regard, the defendants alleged that the patent was not new in that it formed part of the state of the art immediately before the priority date of the

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claims to the invention. The evidence adduced bearing out the defendants' allegation, the Court upheld the argument on this point.

Finally, the issue of invalidity through lack of an inventive step was addressed.

An invention is only patentable if it involves an inventive step. An invention shall be deemed to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms, immediately before the priority date of the invention, part of the state of the art. Again, the defendants' argument was sustained by the Court.

The plaintiff's action was accordingly dismissed, and the defendants' counterclaim upheld.

Notes

For Intellectual property law see:

. [LAWSA First reissue Vol 29](#)

Cases referred to in judgment

South Africa

Aktiebolaget Hässle and another v Triomed (Pty) Ltd [\[2002\] 4 All SA 138](#)
[\(2003 \(1\) SA 155\)](#) (SCA)

<i>De Beers Industrial Diamond Division (Pty) Ltd v Ishizuka</i> [1980] 3 All SA 447 (1980 (2) SA 191) (T)	404
<i>Ensign-Bickford (South-Africa) (Pty) Ltd and others v AECI Explosives & Chemicals Ltd</i> [1998] 4 All SA 453 (1999 (1) SA 70) (SCA)	420
<i>Gentiruco AG v Firestone SA (Pty) Ltd</i> [1972] 1 All SA 201 (1972 (1) SA 589) (A)	383
<i>Jaga v Dönges NO and another; Bhana v Dönges NO and another</i> [1950] 4 All SA 414 (1950 (4) SA 653) (A)	404
<i>Monsanto Co v MDB Animal Health (Pty) Ltd (formerly MD Biologics CC)</i> [2001] JOL 7939 (2001 (2) SA 887) (SCA)	404
<i>Power Steel Construction Co (Pty) Ltd v African Batignolles Construction (Pty) Ltd</i> 1955 (4) SA 215 (A)	383
<i>Schlumberger Logelco Inc v Coflexip SA</i> [2002] JOL 10174 (2003 (1) SA 16) (SCA)	420
<i>Stauffer Chemical Co and another v Safsan Marketing & Distribution Co (Pty) Ltd and others</i> 1987 (2) SA 331 (A)	383
<i>Vari-Deals 101 (Pty) Ltd v Sunsmart Products (Pty) Ltd</i> [2007] JOL 20698 (SCA) ([2007] SCA 123 (RSA))	405

United Kingdom

<i>Glaverbel SA v British Coal Corporation and another</i> 1995 RPC 255 (CA)	407
<i>Kirin-Amgen Inc and others v Hoechst Manon Róusel and others</i> [2005] 1 All ER 667 (HL)	405
<i>Mölnlycke AB and another v Procter & Gamble Ltd and others</i> (5) (1994) RPC 49 (CA)	420

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Judgment

MURPHY J:

- [1] The plaintiff is the proprietor of patent 2002/1924, which is for an invention entitled "Communication Systems". He has instituted action in the Court of the Commissioner of Patents for an interdict restraining the defendants from infringing or aiding and abetting the infringement of the patent. [Section 45\(1\)](#) of the Patents Act [57 of 1978](#) ("the Act") provides that the effect of a patent is to grant the patentee, 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 defined in the claims of the patent, so that he will enjoy the whole profit and advantage accruing by reason of the invention.
- [2] The first defendant is Vodacom (Pty) Ltd and the second defendant is Vodacom Service Provider Company (Pty) Ltd. The first defendant constructs and maintains a GSM cellular network in South Africa. The second defendant is a cellular service provider that utilises the first defendant's cellular network. Throughout the trial the defendants were referred to collectively as "Vodacom". As relief is sought against them jointly arising out of the same alleged conduct there is no objection to referring to them as such, and I will do likewise in this judgment.
- [3] Vodacom denies that it has infringed the plaintiff's patent through use of the plaintiff's invention in its products, services and/or intelligent communication network methods and systems; and claimed further that the patent was in any event invalid for lack of novelty and for being obvious. It raised two other defences in its plea, namely: the invention of the patent is not patentable in terms of [section 25\(2\)\(e\)](#) of the Act in that it consists of a scheme, rule or method for performing a mental act or doing business; and further that the claims of the complete specification are not fairly based on the matter disclosed in the specification. It became evident at the conclusion of the trial that Vodacom did not persist with the latter two defences. Nothing further therefore need be said about them.
- [4] In order to decide whether Vodacom's products and services etcetera infringe the patent it is necessary to determine what the essential integers or features of the claims of the patent are; the precise scope of the invention or monopoly being defined by the claims of the patent specification. If all the essential integers of a claim are present in the targeted Vodacom products, such will infringe the patent (*Stauffer Chemical Co and another v Safsan Marketing & Distribution Co (Pty) Ltd and others* [1987 \(2\) SA 331](#) (A) at 347A-D). The task at hand, thus, is to ascertain what the language used in the specification means. The specification must be construed like any other document, mindful of the objects of the specification and its several parts (*Power Steel Construction Co (Pty) Ltd v African Batignolles Construction (Pty) Ltd* [1955 \(4\) SA 215](#) (A) at 224A). The claims of a patent specification do not constitute a separate document in any sense, but remain part of a specification which should be interpreted as a whole. Every portion of the specification is to be read with reference to the other portions of the document whether they precede or follow (*Gentiruco AG v Firestone SA*

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The patent specification and the claims

[5] The specification of the patent states that the invention relates to communication systems. The opening paragraph declares:

"In particular, it relates to a method of, and a system for, enabling use of a communication network by a subscriber. It also relates to a method of dispensing enabling codes to a cellular telephone user."

The three distinct features mentioned, it will be seen presently, match the three primary substantive claims of the patent, namely, claims 1, 14 and 15. As background to the invention, the specification outlines the "pay as you go" or prepaid system that has accompanied the proliferation in the use of cellular telephones ("cellphones"). In that system, a user or subscriber purchases airtime to a selected value from a service provider in advance. The purchase of the airtime allows the subscriber to use a cellphone to communicate via the provider's cellular network to a predetermined extent. The specification continues:

"In order to initiate use of the network, the user or subscriber typically purchases a voucher of a particular value. The voucher provides an enabling or PIN code that is fed into the network via the cellphone thereby to enable use for the selected value. Once the cumulative use of the network by the user reaches the value of the purchased airtime and the voucher has been depleted, use of the network by the user is terminated and a further voucher must then be purchased."

[6] The specification concludes in relation to the pre-existing "pay as you go" prepaid system with the observation that "it is this application of the invention which must be predominantly, but not exclusively, borne in mind". It is emphasised, though, that the invention may be applied in any communication media, for example a conventional landline telephone or the like. The specification does not in its body expressly identify the object of the invention in relation to the "pay as you go system", or the limitations and deficiencies of that system. It nonetheless identifies three "aspects of the invention" implicitly regarded as a step forward or improvement, the overt purpose of which is captured in the final paragraph of the body of the specification, which reads:

"The inventor believes that the invention, as illustrated, provides an enhanced method of, and system . . . for enabling use of a communication network by a subscriber. The method enables dispensing of enabling codes or vouchers to a cellular telephone user remotely without the need for the subscriber physically to obtain a voucher from a service provider."

[7] Perhaps the best depiction of the idea is one of a cellphone user being able to upload additional airtime by relying exclusively on the facilities of the cellphone itself; that is by phoning or SMSing an airtime supplier. The three "aspects of the invention" referred to in the body of the specification equate to claims 1, 14 and 15, the substantive claims. The balance of the body of the specification is devoted to a description of the subsidiary claims and a written elucidation of the accompanying diagrammatic representations of six various embodiments of a system, in accordance with the invention, for enabling use of a cellular communication network by a subscriber.

[8] The invention and the monopoly sought are defined in 28 claims. As indicated, three of the claims are substantive, the remaining claims are

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subordinate and, it is common cause, are interdependent on the antecedent substantive claims. The parties throughout the proceeding have referred to the integers of the substantive claims alphabetically, though they are not reflected as such in the specification. For the sake of convenience I will do likewise.

[9] Claim 1, divided into alphabetic integers, is as follows:

- (a) A method of enabling use of a communication network by a subscriber, the method including:
- (b) remotely identifying the subscriber;
- (c) verifying subscriber details with reference to the subscriber details stored in a subscriber database; and
- (d) selectively providing the subscriber with an enabling code,
- (e) which, when fed into the network, provides the subscriber with airtime credit which allows communication via the network to a predetermined extent.

[10] It is common cause that claims 2-5, 7 and 9-13 are dependent on claim 1.

[11] Claims 2, 3 and 5 add integers narrowing integer (b) of claim 1. Thus, claim 2 includes remotely identifying the subscriber by receiving a telephone call from the subscriber on a receiving telephone; claim 3 by means of a caller line identification facility ("CLI"); and claim 5 includes identifying the subscriber without answering the telephone call from the subscriber and calling the subscriber back to obtain the password contemplated in claim 4. The latter (claim 4) and claim 7 complement both integers (b) and (c) of claim 1. They include, within the method, verification of subscriber details by obtaining a password from the subscriber seeking use of the network and verifying the password against data contained in a subscriber database (claim 4); and the means of obtaining the password include automatically answering the subscriber's telephone call by means of an interactive telephone system which obtains the password from the subscriber (claim 7).

[12] Claim 9 is interdependent on integers (a) and (e) of claim 1 and includes within the method generally the

obtaining from the subscriber of the monetary values of the airtime credit the subscriber wishes to purchase and checking to ascertain whether the subscriber has sufficient funds available to purchase the airtime credit, prior to providing the subscriber with an enabling code. Claims 10-12 relate to the obtaining of enabling codes from a supply of enabling codes (claim 10), including selecting a voucher from a stock of vouchers on which the enabling codes are provided (claim 11), or from an enabling code dispensing means which has a stock of enabling codes in electronic form (claim 12).

[13] Claim 13 adds definition to integer (e) of claim 1 in that "providing the subscriber with an enabling code" includes sending the code to the subscriber by way of an SMS (short message system) message.

[14] As will become apparent in due course, the plaintiff initially relied on two species of alleged infringement by Vodacom. Neither though involved any alleged infringement of claims 6 and 8. Accordingly, I mention them only for the sake of completeness. Claim 6 adds an integer for remotely

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identifying the subscriber by logging subscriber calls in the administration system and then sequentially calling back the subscribers logged in. Claim 8 adds to claim 6 by allowing the subscriber to log in by providing his password via a keypad on his or her phone.

[15] Claim 14, a substantive claim, can be divided into the following integers:

- (a) A method of dispensing an enabling or PIN code to a cellular telephone user which includes the steps of:
- (b) remotely identifying the user;
- (c) verifying user details with reference to user details stored in a user database; and
- (d) selectively providing the user with an enabling or PIN code.

[16] Claim 15 can be divided into the following integers:

- (a) a system for enabling use of a communication network by a subscriber, the system including:
- (b) a database including data on a plurality of subscribers requiring use of the communication network;
- (c) identification means for remotely identifying the subscriber;
- (d) verification means for verifying subscriber details with reference to the database; and
- (e) a stock of enabling codes from which an enabling code is selectively dispensed to the subscriber,
- (f) the enabling code being operatively fed into the network to a predetermined extent.

[17] Claims 16-22 are all dependent on claim 15. Claim 16 has an integer that the database (integer (b) of claim 15) includes financial data on each of the subscribers, the system being configured to update the database to reflect each transaction with each subscriber. The other integers include: telephonic communication means for receiving a telephone call from a subscriber (claim 17); a caller line identification facility as an identification means (claim 18); an administrative module for logging calls received from subscribers (claim 19); and an interactive telephone system configured to obtain a password from a subscriber to verify the subscriber's details (claim 21). By comparison, claim 20 has an additional integer that the telephonic communication means include a receiving telephone, the system including an operator (a person) who obtains a password from the subscriber and uses the password to verify the subscriber's details. Claim 22 adds to claims 20 and 21 with additional integers: a computer with an administrative system and a caller line identification module; a modem for receiving a telephone call from a subscriber, who is identified by the caller line identification, the modem being linked to the computer so that the subscriber's identification details are fed to the computer for recordal on the database.

[18] Claims 24-25 are also dependant of claim 15. Claim 24 provides for an enabling code dispensing means which has a stock of enabling codes stored in electronic format. Claim 25 provides for an SMS messaging system whereby an enabling code can be forwarded to a subscriber in the form of an SMS.

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[19] Claim 23, like claims 6 and 8, has never been in contention as being infringed. It is dependent on claims 15-22 and adds an integer in which the stock of enabling or PIN codes is in the form of paper vouchers, as compared to a stock of enabling codes stored in electronic format (claim 24).

[20] Claims 26-28 are omnibus claims being claims to new methods and systems as substantially described in claims 1, 14 and 15 (claims 26-27) and in the complete specification (claim 28).

The alleged infringement

[21] Paragraph [6] of the plaintiff's particulars of claim alleges that Vodacom, without the authority of the plaintiff, has used or exercised the methods described in claims 1-13 (other than those described in claims 6 and 8). Paragraph [7] alleges that Vodacom, without the authority of the plaintiff, has used or exercised a method of dispensing an enabling or PIN code to a cellular telephone user by remotely identifying the user; verifying user details with reference to user details stored in a user database; and selectively providing the user with an enabling or PIN code; and thereby infringed claim 14. Likewise, paragraph [8] alleges use of the system and the variations thereof described in claims 15-22, 24 and 25. It is contended that the use or exercise of the system occurred by Vodacom operating the methods of claims 1-14 (excluding claims 6 and 8).

[22] The exact infringing conduct upon which the plaintiff relied is spelt out in paragraph [9] of the particulars of claim. Two instances of specific conduct are identified. Both involve means of gaining access to a communications network. The one is set out in paragraph [9.1] of the particulars; the other in paragraph [9.2]. Paragraph [9.1] relates to the so-called credit card Autocharge method of recharging and must be read with paragraph [9.3] which mentions that system. Paragraph [9.2] relates to the hybrid system or prepaid top up arrangement, the nature of which will become clearer later. Both instances comprise methods by which the plaintiff obtained airtime from Vodacom for use on the Vodacom network. Paragraph [9] reads:

"In support of the foregoing, the plaintiff will rely on:

- 9.1 the use or exercising of method 1 and/or method 2 and/or the system, as described above, by means of which airtime credit was provided to telephone number 072 097 2049 under password 397758, the details of which were sent to it by telephone number 082 009 9972 on 22 February 2006 on or about 9:17am; and/or
- 9.2 the airtime credit in the amount of R135.00 that was provided to telephone number 082 444 4293 on 28 February 2006 at or about 20:04pm;
- 9.3 the methods referred to in paragraphs 6 and/or 7 above and in terms of which the system (as more fully described and/or amplified in paragraphs 8.1-8.10 above) is operated was advertised by either the first or the second defendants on their web page on 22 February 2006 under heading 'Autocharge', a copy of which is attached and marked 'B'."

[23] The methods and system referred to in paragraph 9 are those in claims 1, 14 and 15 of the patent specification respectively. Paragraph [9] is badly

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drafted in certain respects. The parties agreed however that the two instances of alleged infringement might better be stated as follows:

- (a) The use or exercise of the method or the system used in providing airtime credit in the amount of R29 to telephone number 072 *** **** under password *****, the "details of which were sent to it" by telephone number 082 009 9972 on 22 February 2006 on or about 9:17am (paragraphs [9.1] and [9.3] of the particulars of claim). The method referred to here is operated by Vodacom on its web page under the heading "Autocharge".
- (b) The use or exercise of the method or the system used in providing airtime credit in the amount of R135 to telephone number 082 *** **** on 28 February 2006 at or about 8:04pm (paragraph [9.2] of the particulars). This method was referred to during the trial as the "hybrid" or "prepaid-top-up" system. This formulation of the allegation is legitimate and follows from reading it sensibly together with paragraph [9.1].

[24] The defendant's request for further particulars yielded the following particulars supplementing the allegations in paragraph [9.1] of the particulars in relation to claims 1, 14 and 15. The "details" referred to were the password and the airtime credit; the manner in which the airtime credit was provided was by means of an SMS; and the method of payment used to obtain the airtime credit was a "credit card".

[25] In answer to a request for further particulars about the password referred to in paragraph [9.1] and its relation, if any, to the enabling code referred to in integers (d) and (e) of claim 1, integers (a) and (d) of claim 14 and integers (e) and (f) of claim 15, the plaintiff stated that the password is not the enabling code. He asserts rather that the enabling code is:

". . . the instruction that is sent from the Authocharge server to the first and/or second defendant's billing platform. The actual instruction and transmission protocol is unknown to the plaintiff and is peculiarly within the knowledge of the defendants" (paragraph 8 of plaintiff's response to the defendants' request for particulars for trial).

Such enabling code, it was contended, was sent to the subscriber's account and was fed into the network by Vodacom's Autocharge platform on behalf of the subscriber at the subscriber's request and instruction.

[26] The plaintiff further confirmed in the response that he saw the password "397758" referred to in paragraph [9.1] of the particulars of claim as the relevant password required by claim 4, being dependent on claims 1, 2 and 3, as a means of remotely identifying the subscriber; and that the password was obtained from the subscriber when "it was fed into the electronic system via the keypad on the handset of the cellular phone".

The Autocharge and the Prepaid Hybrid products distinguished

[27] Before dealing with the further particulars sought in relation to paragraph [9.3] of the particulars, it is best to preface the discussion by mentioning that on the last day of the trial the plaintiff abandoned his case for infringement based upon Vodacom's Autocharge system and proceeded exclusively with the contention that the infringing conduct was the use and exercise of the method and system employed in the hybrid or prepaid top-up system referred to in paragraph [9.2]. It remains nevertheless

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important first to explain the Autocharge system and later to examine the plaintiff's reasons for concluding ultimately that it did not infringe the claims of the patent, as such have a bearing upon the finding of the presence or otherwise of the integers pertaining to the enabling code in the hybrid system.

[28] The two witnesses who testified on behalf of Vodacom, Mr Mukuh Rathilall and Mr Walter Gathercole, both clarified the workings of the Vodacom Autocharge system, which was previously operated by a company associated with Vodacom, namely Cointel (Pty) Ltd. The plaintiff accepted their accounts as correct and

accurate. Mr Rathilall is presently employed by Vodacom as its Community Service Manager. He has responsibility, among others, to provide support to the Autocharge product and is thus familiar with its inner workings. Mr Gathercole, who testified as Vodacom's expert, is a C5 technician and a communications network engineer, with extensive experience in the telecommunications industry. He has attended numerous courses and received training in intelligent networks. He has had responsibility for investigating and assessing the feasibility of several Vodacom products and their engineering implementation. He is possessed of a comprehensive expert understanding of the operation of both the Autocharge and hybrid products at issue in this case. Both witnesses gave a description of the Autocharge system consistent with the portrayal of it in the defendants' expert summary, filed in terms of rule 36(9)(b) of the Uniform Rules of Court by Mr Gathercole, and confirmed by him during his later evidence.

[29] The Autocharge service entails a recharge of airtime by use of a credit card. It is not disputed that it discloses at least some of the integers of the claims of the patent in suit. To perform a credit card recharge it is necessary first to register with the service in order to do so. A subscriber must obtain a registration form (downloaded from the website), complete it and return it to Vodacom together with a photocopy of the front page of his or her ID book and copies of the front and back of his or her credit card. Vodacom will then confirm the credit card details with the issuing bank, capture the customer's details in a database and set a credit threshold for the customer in the database. Vodacom thereafter will contact the customer by telephone and identify the customer by referencing the subscriber information in the database. After verification the customer is orally provided with a Personal Identity Number ("PIN"), which is randomly generated by a computer and stored in the customer database. This ends the registration process. So registered, the subscriber is enabled to access and use the network by means of credit card recharge on the Autocharge system. The credit card recharge is therefore undeniably both a method and system of enabling use of a communication network by a subscriber.

[30] When wanting to do a credit card recharge, a registered subscriber dials a specific number (100) to access the recharge system. He is then connected with a voice response unit ("VRU"). The VRU responding to the telephone call from the subscriber is "a telephonic communication means for receiving the telephone call from the subscriber". The VRU automatically answers the telephone call and is an interactive telephone system (involving voice prompts to the subscriber) and a modem for receiving the telephone call from the subscriber. The VRU obtains the PIN from

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the subscriber which the subscriber enters on the keypad of his cellphone. When the VRU answers the telephone call from the subscriber, a computer within the system obtains the subscriber's telephone number by automatic number identification ("ANI"), which is thus a method of identifying the subscriber by means of a caller line identification facility. The computer is therefore identification means for remotely identifying the subscriber and includes a caller line identification facility or module. A computer within the system checks the entered PIN against the information contained in the customer database to determine if the PIN matches the phone number of the calling phone. This computer is thus verification means for verifying the subscriber details with reference to the subscriber database. The subscriber database includes a financial threshold which is financial data regarding each subscriber. A computer within the system is configured to update the database to reflect each transaction with the subscriber. The computer also logs calls received from subscribers and thus is or includes an administration module or system. The computer is linked to the VRU (modem) so that, *inter alia*, the subscriber's telephone number, which is his identification details, is fed to the computer for recording on a database. I will discuss other technical aspects of the Autocharge system in more detail later.

[31] From the subscriber's perspective though it is a fairly straightforward operation: the subscriber phones the system; is met with the VRU; enters his PIN; once verified is prompted to select a specific amount of airtime; if he has sufficient credit his credit card is debited with the selected amount and his airtime account on the network is credited with the same amount. An SMS is then sent to the subscriber confirming the success of the exercise, the recharge value and the updated balance of airtime available.

[32] Both Rathilall and Gathercole testified that the system and methods used in the Vodacom Autocharge service (earlier operated by Cointel (Pty) Ltd) have been used since its commercial launch in 1998. This became common cause during the course of the trial. The system and methods were hence present prior to 24 May 2000 (the priority date) and during February 2006 (the date of alleged infringement).

[33] In so far as the plaintiff alleged that it was this method that infringed claim 1 of the patent, the defendants in their request for further particulars (apparently with integers (e) and (f) of claim 1 in mind) requested the plaintiff to state what the plaintiff alleged constitutes the relevant "enabling code" when the Autocharge facility is used. To which the plaintiff replied: "When the Autocharge facility instructs the prepaid billing platforms to apply a specific airtime credit" - in other words, when Vodacom's computers give an instruction to the network to credit the subscriber's account (paragraph [13(a)] of the request for further particulars and paragraph [51] of the response). In response to the request to state the manner in which and the stage at which the relevant enabling code is provided to the subscriber when using the facility (paragraph [13(b)]) the plaintiff responded: "It is provided as airtime credit to the subscriber's account after the successful receipt of funds from the subscriber" (paragraph[52]). And finally, as to the manner in which and the stage at which the relevant enabling code is fed into the network, the answer was: "The enabling code is fed into the network automatically on behalf of the subscriber (at his request or instruction)."

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[34] I turn now to a brief overview of the hybrid system, which the plaintiff contends is an added infringement of

the patent (paragraph [9.2] of the particulars of claim). Again, I will reserve discussion of its more technical aspects till later. It will be recalled that the alleged infringing conduct comprised the provision of an airtime credit in the amount of R135 to the specified telephone number in terms of a "hybrid" prepaid contract. Again, both Rathilall and Gathercole gave evidence about the nature of this contract, the latter confirming the explanation provided in the rule 36(9)(b) expert summary.

- [35] A hybrid prepaid contract provides for regular airtime credits to be provided in respect of the telephone number that is the subject of the contract. The subscriber concludes a fixed-term contract (with a period of two years or more) with the provider for the provision of a certain amount of airtime to be credited to his airtime account on the network against a monthly debit of the same amount to his bank account. This usually, if not always, occurs on the first day of the month. Should the airtime be depleted by the subscriber before the next automatic recharge on the first of the next month, he may top-up his airtime by purchasing a voucher, or at a bank ATM, or by using the credit card recharge Autocharge (provided he is registered to do so). Without getting into technical details, it may be helpful to mention at this point that Gathercole testified that where such a contract applies no enabling or PIN code is provided to a subscriber for enabling the use of the communication network. The provision of airtime credit, which allows communication via the network to a predetermined extent to a subscriber, he said, does not depend on the feeding into the network of an enabling code and there is no stock of enabling codes.
- [36] In response to requests for further particularity with reference to claim 1, as it related to the hybrid contract, the plaintiff indicated his reliance upon the method of obtaining airtime credit "by way of a signed debit order in the bank account of the proprietor of telephone number 082 *** *****". The enabling code, he claimed, was the instruction sent from a financial control system to the prepaid top-up billing platform. And the manner in which the relevant enabling code was provided to the subscriber was as an instruction from a financial management system to the prepaid top-up billing platform on behalf of and/or on request or on the instruction of the subscriber. Similarly, for the purposes of claim 14, the enabling code was the instruction from the financial management system to the billing platform, the exact transmission protocol being unknown to the plaintiff, and the enabling code was provided to the user as airtime credit.
- [37] It is convenient to interpose at this stage that the defendants submitted that there is no difference between the "enabling code" as defined in the pleadings for the purposes of the act of infringement alleged in paragraphs [9.1] and [9.3] of the particulars on the one hand and paragraph [9.2] on the other. The significance of that submission will become more understandable later.
- [38] At the commencement of the trial, the plaintiff's position was that the manner in which the transactions took place as pleaded in paragraphs [9.1] and [9.2] of the particulars of claim indicated to him that all the integers of the claims of his patent, excluding claims 6, 8 and 23, are used or exercised in such transactions. The focal point of the plaintiff's case,

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though, at least initially, according to the defendants, and as borne out by the evidence and the turn of events during the trial, was the Autocharge system and not the hybrid prepaid top-up. As the trial progressed, however, the focus shifted to the hybrid system, until eventually the case for infringement based on the Autocharge system was abandoned.

The amendments

- [39] At the early stages of the trial, two amendments were made to the pleadings, which bear upon the case for infringement based on the hybrid system. In the request for further particulars the defendants had asked whether the plaintiff alleged that the provision of airtime credit as described in paragraphs [9.1] and [9.2] of the particulars occurred in terms of the Autocharge facility as reflected on the website pages making up annexure "B" to the particulars of claim. The plaintiff answered in the affirmative. It is self-evident, and accordingly now undisputed, that the provision of airtime in the hybrid contract (paragraph [9.2]) does not happen in this fashion. It occurs monthly in terms of the contract without any initiating action being required on behalf of the subscriber. For that reason, an amendment was sought early during the trial to change the original reply to reflect a negative answer to the question in relation to paragraph [9.2]. Not much turns on this, except perhaps that it may add credence to the assertion of Mr *Bowman*, counsel for defendants, that the plaintiff's complaint, and hence his own grasp of the claims of his patent, was primarily (if not exclusively) about the infringing nature of the Autocharge system and its use to top-up a hybrid contract (at the instance of the subscriber where the contracted amount of airtime had been depleted before month end), and not actually about the automatic monthly recharge of the hybrid contract itself.
- [40] The second amendment also related to paragraph [9.2] of the particulars of claim. To begin with, the plaintiff alleged that all the claims apart from claims 6, 8 and 23 were infringed. The aim and purpose of the second amendment was to exclude from the infringement pleaded in paragraph [9.2] allegations that claims 4, 5, 7, 20, 21 and 22 were infringed by the hybrid system. These claims all relate to the use of a password; that is the obtaining of a password from the subscriber and its verification in the subscriber database, and variations of the method and system for that purpose. The amendment amounts to a concession that such integers are not disclosed in the hybrid system where, unlike the Autocharge system, the airtime credit is generated automatically on a monthly basis.
- [41] The effect then of both amendments was that at the commencement of the trial the plaintiff alleged that all the claims of the patent, except claims 6, 8 and 23, were infringed by the Autocharge system; and claims 1-3, 9-12, 14-19 and 24-28 were infringed by the prepaid hybrid contract.

A survey of the evidence related to the allegation of infringement by the Autocharge service

[42] Despite the case based on the Autocharge system having been abandoned, in order to understand other aspects of the case overall it is still necessary, as I have said, to canvass the evidence in relation to it in some detail. The thrust of Gathercole's evidence was that in the Autocharge service the PIN code provided to the subscriber does not when fed into the system

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by the subscriber provide the subscriber with a pre-determined amount of airtime credit without any further action on the part of the customer. No pre-determined amount of airtime credit is associated with the PIN code issued to the subscriber. When the subscriber feeds the PIN code into the network it serves as a password to verify the customer and he or she must thereafter select a recharge value, which, once selected, will be credited to the subscriber's account on the network. Furthermore, the entry of the PIN and the selection of the recharge value will only be effectuated if permitted by the Autocharge threshold and the subscriber's credit status with the bank. This testimony, as I understand it, seeks to distinguish the PIN used as a password in the Autocharge service, and the PIN used in the pre-existing "pay as you go" system where the voucher or scratch card provides a PIN (described in the specification also as an enabling code) which the subscriber feeds into the network from his handset to enable use of the previously selected value. The point at hand being that Gathercole was of the opinion that integers (d) and (e) of claim 1, integer (d) of claim 14 and integers (e) and (f) of claim 15 are not found in the Autocharge service. At the conclusion of Gathercole's evidence, the plaintiff agreed with that opinion and abandoned the case predicated upon his earlier contrary opinion.

[43] Both Rathilall and Gathercole testified that the Autocharge service operated from about June 1998, initially under the auspices of Cointel (Pty) Ltd. Gathercole started researching and assessing the system in mid 1997, completed the design in February 1998 and put it into production in about June 1998.

[44] In order to understand the plaintiff's motivation in abandoning the case for infringement based on the Vodacom Autocharge system it will be helpful to reflect briefly on the plaintiff's idea and the evidence regarding the provenance of the Autocharge system. Given that the approach to determining an infringement involves the narrower inquiry of establishing whether or not the conduct comprising the alleged infringement falls within the scope of any of the claims of the patent, such evidence strictly speaking may be irrelevant and hence inadmissible in the determination of the question of infringement. However, now that the allegation based on the Autocharge system has been abandoned, there can be little quarrel about considering it as background relevant to the remaining issues.

[45] The plaintiff testified that the idea for his patent came to him late one night while he was driving through a remote part of North West Province. His fellow passengers were asleep and he wished to keep awake by engaging in a telephone conversation with his business partner. He operated his cellphone on a "pay as you go" system. During the telephone call to his partner he ran out of airtime and could find no facility to purchase a voucher to upload more. This set him thinking that there should be a method and system whereby a subscriber could remotely load airtime by simply using his cellphone handset. He thus conceptualised a system whereby the subscriber would be permitted to use a communication network involving remote identification and verification of personal particulars and financial data (creditworthiness) from a database enabling the subscriber to be awarded airtime directly. He discussed the matter with his attorneys and later filed the patent specification in May 2000. He

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immediately set up a business based in Nelspruit which traded as "Prepaid Online" ("PPOL"). The manner in which PPOL functioned is explained in a marketing proposal presented by the plaintiff to Vodacom in January 2003 (exhibit A210-215). The proposal explains that PPOL offers an "M-commerce solution" which enables users of a prepaid cellular system to purchase their airtime recharge vouchers or any other value carrying enabling code from their handsets in the safety of their homes or while on the move. The proposal states further that PPOL had patented a specific way of requesting, paying for and delivering a value carrying enabling code for any resource specific service driven entity:

- ". Requesting a service from a distribution agent by identifying yourself via CLIP (caller line identification).
- . Paying for the service in advance and specifying a default product to receive when requesting such.
- . The product or enabling code being delivered by the short message platform for the requesting device."

[46] The marketing proposal elucidates further that PPOL is a technology that is most visible for the end user of prepaid products. At that time those products available were: Telkom Prepaid, Vodacom Prepaid, MTN Prepaid and Cell C Prepaid. The simple idea is that the user can request any product using the encoded SMS protocol request command, enabling the subscriber to request any product from the PPOL system to be delivered to him or even a third party. All prepaid voucher products are delivered to the subscriber handset by SMS. The plaintiff elaborated in his testimony that the stock of enabling codes was uploaded into the PPOL system by PPOL purchasing a large number of scratch cards (vouchers) with staff manually entering each scratch card or voucher PIN into the system. Each entry (as with each voucher) was associated with an airtime value (R29, R50, R100 etc). End users wanting to use the system would have to subscribe to the PPOL system and be entered (by a process of registration) as a user on the PPOL database. In its original form the end user chooses a default recharge value on enrolment. A subscriber needing airtime initiates a recharge request by making a call to the PPOL recharge number. The call is not answered and is thus free of charge. The PPOL system will, however, use the information transmitted by the telecom switch to identify the user. The user can request any product on the system by SMS. The product is then sent to the end user handset by SMS. The system so operated is a prepaid system in the sense that the delivery of prepaid vouchers (airtime) was

conditional on the user having a positive balance (funds being collected monthly in advance from the user ideally by a monthly ACB bank transaction as authorised by the user on enrolment or registration, but also by cash payment at the PPOL offices), such balance being reflected in the financial information stored on the PPOL database. The basic financial arrangement then being one of "first pay then use".

[47] By 2002, PPOL had become a lucrative business. At the end of 2002, the plaintiff met and entered into discussions with two officials of Vodacom, Mr Blaise Somerville and Mr Vernon Hambrock. This encounter led to the production of the marketing proposal. They met first at the Leopard Creek Golf Course in Mpumalanga. According to the plaintiff, Somerville and Hambrock were enthusiastic about his product and invited him to

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present a proposal to Vodacom in Sandton in January 2003. The plaintiff's interest and purpose in presenting his proposal to Vodacom is stated in the marketing proposal in the following way:

"We would like you to market the prepaid online product in your Vodashop outlets throughout the country, we believe that subscribing people to the service will benefit your Vodashop outlets hugely."

The plaintiff saw advantage in co-operation with Vodacom in the possibility it offered to obtain an aggregated stock of vouchers in electronic form, thereby obviating the need to upload individual vouchers into the PPOL system manually. The marketing document concludes with a revenue share proposal mutually beneficial to PPOL and Vodacom. For reasons unknown, nothing in the way of co-operation between Vodacom and PPOL came to pass from the presentation of the proposal.

[48] This evidence was offered, it seems, not to show that there had been a textual infringement, but in support of the contention by the plaintiff that Vodacom probably obtained its ideas for the Autocharge system from the PPOL proposal.

[49] At the time he filed the patent specification, the plaintiff was aware of the existence of the Autocharge service made available to the public by Cointel (Pty) Ltd. As part of his research into whether his patent had been anticipated, prior to filing the specification, the plaintiff investigated the workings of the Cointel product. From the office of his patent attorney he phoned into the system. He concluded that the Cointel system was "completely different" because it did not contain a database of subscribers, nor did it ask for a PIN to be entered. Rather, so he said, the system prompted the subscriber to directly enter his or her credit card number. Cognisant of these differences, he instructed his patent attorney to proceed with registration of the patent. During cross-examination the plaintiff was referred to a discovered document, exhibit "B124", dated 8 January 1999, as an indication that he was misstating the method by which the Cointel Autocharge system functioned. It is a document headed "Autocharge", and is a pro forma letter addressed to applicants for a credit card Autocharge facility. It states that after registration "we will contact you shortly thereafter to inform you of your personal 4-digit PIN number that will allow you to use the Autocharge system". It goes on to say that once registered: "To recharge you will simply need to dial 100 from your Vodago phone, select the credit card option and enter your personal 4-digit PIN when prompted." When confronted with the contradiction between this document and his testimony, the plaintiff referred to a Memorandum of Agreement between Vodacom (Pty) Ltd and Cointel (Pty) Ltd (exhibit "B1-10") dated 12 August 1997 where the following is stated in the preamble:

"Vodacom intends to introduce a recharge facility for the user without the user having to purchase an airtime voucher, but instead merely dialing on the handset the short dial access number 100 and thereupon entering his bank card number which will facilitate the advance of credit and thus enabling the user telephone to be recharged."

The plaintiff contended that this depiction of the Cointel system accorded with how the system operated when he tested it shortly before filing his patent specification.

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[50] The plaintiff referred also to exhibit "B237", an internal Vodacom Engineering Intelligent Networks memorandum dated 21 August 2000 headed "Cointel Credit Card Recharge". The relevant paragraph of this document reads:

"Cointel approached Vodacom in 1997 with a proposal to implement a recharge service whereby a user would use his credit card via an IVR system . . . to purchase a Vodago recharge PIN. The user would then use this PIN to recharge his account. This recharge PIN would have been obtained from a centralised database maintained by the company ECNet.

Vodacom had already looked at implementing such a service in conjunction with Siemens with the initial implementation of the Vodago service and for that reason an authentication PIN was provided for on the 5151 DTMF menu (balance enquiry by voice access). When it was decided that Siemens would not provide this service, alternative options were considered and as such the authentication PIN was also removed for the sake of simplicity."

Further in the document under the heading "Development", the following is stated:

"Vodacom suggested it would be more feasible to provide this service using a credit card to update the user account directly on the IN platform since the use of a recharge PIN in such a transaction was superfluous."

The plaintiff contended in his testimony that these passages indicate that the authentication PIN never functioned before that date and confirmed that when he tested the system in 2000 "it worked so that you do not have to enter a PIN and that you have to enter your bank card number".

[51] In response counsel referred the plaintiff again to the Autocharge application form of 1999 (exhibit "B124") which includes the statement:

"You can recharge your Vodago phone 24 hours a day/7 days a week from anywhere within the Vodacom network coverage area. You will never ever need to go out and purchase another Vodago recharge voucher ever again."

And, further, he pointed to the explanation contained in that document of how a recharge is accomplished: registration, dial 100, select the credit card option and "enter your personal 4-digit PIN when prompted". The plaintiff conceded that this system operated similarly to his testing of the Autocharge system in 2006 (paragraphs [9.1] and [9.3] of the particulars of claim), but said the system worked differently when he tested it in early 2000. Exhibit "B124" is dated 8 January 1999. This date is corroborated by two fax transmission reports reflected on the document indicating that it was faxed to and from the subscriber by and to Vodacom on the same day.

[52] The purpose of this debate during evidence was to show that the Cointel system anticipated the patent, with the plaintiff taking the position that the integers regarding the providing of an enabling code and feeding it into the network were not present in the Cointel system in 2000, but that those integers were indeed present in 2006 and thus infringed the claims of the patent.

[53] Rathilall confirmed that there was no difference between the system operated by Vodacom in 2006 and the way it worked under Cointel in 2000. He added that in 2000 Cointel was offering the service publicly, though the customer registration process was done through Vodacom. He disagreed that it had been possible to obtain airtime in 2000 by directly

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using a credit card. From the time he had been employed (April 2000), Cointel and Vodacom had always required an application form to be filled out, and before a subscriber could access the recharge system he or she required a PIN linked on the Vodacom system with their personal and financial information. Thus, after dialling 100 the subscriber wanting to do a credit card recharge will select option 2 (after being prompted by the VRU to do so) and this requires entry of the PIN and not the credit card number. The PIN number operates to verify the subscriber information. Its purpose is to avoid or minimise the possibility of fraud presented by the direct use of a credit card. The use of the PIN, being a number known exclusively by the subscriber, was safer and allowed the subscriber after entering it to select airtime values stipulated by the VRU, provided such fell within the credit threshold available to the subscriber as appearing within the subscriber database.

[54] In the course of his cross-examination Rathilall was requested to discover additional documents from the archives of Vodacom related to the registration of subscribers for the Cointel credit card Autocharge. From these the plaintiff estimated that about 11 000 persons had registered for the Cointel Autocharge service ("Autocharge service") between 1999 and 2003. Counsel for the plaintiff was able to demonstrate that these figures fell short of the expectation in various Vodacom press releases expressing the hope of attracting between 100 000-400 000 subscribers at various times. Gathercole testified that the present number of subscribers using the Autocharge system was about 59 000. This figure appears to have come as something of a surprise to the plaintiff, and indeed contributed, so he says, to his decision to abandon the case based on the Autocharge "infringement". By contrast, the subscribers using the prepaid hybrid contract number approximately one million.

[55] Gathercole, as mentioned, was the primary designer of the Autocharge service. He started the credit card Autocharge design in mid-1997 and it "went into production" in June 1998. He denied that it was ever possible to upload airtime on the Autocharge system by directly using a credit card. Thus, he denied the plaintiff could have performed his test on the Cointel system in the manner he claimed he did. The VRU prompt always required the subscriber to enter the 4-digit PIN supplied to the subscriber at the end of the registration process. He testified with reference to exhibit B2, the memorandum of agreement between Cointel and Vodacom, and exhibit B237 the engineering document, that there had initially been an intention to use the credit card in the clear, but after further consultation with the banks Vodacom was strongly advised not to do this because of fraud. The memorandum of agreement was accordingly amended. In so far as the engineering document referred to negotiations with Siemens and a decision to remove "the authentication PIN" for the sake of simplicity in relation to the 5151 DTMF menu, such related to a prepaid balance enquiry option on the IN platform and not a credit card recharge. He was adamant that a function for use of a "credit card in the clear" was never introduced or used.

[56] Gathercole was also referred to a technical document - "Credit Card Recharge Volume 1 - Tandem Functional Specification" - of which he was the originator and which had been released on 14 January 1998

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(exhibit B33). This document deals with the technical requirements of introducing the Autocharge system. In its introductory part it states:

"The Vodago Pre-Paid service is being continuously enhanced so as to comply with new user requirements. The implementation of an electronic interface between Vodacom and various banks is being established for credit card recharge transactions. This will allow direct deposits into the Pre-Paid user's account once the transaction has been validated by the bank. The implementation of such a service will be done as a Partnership with Echnet (Pty) Ltd, Cointel (Pty) Ltd and Vodacom (Pty) Ltd. The electronic credit recharge transaction option will also be available on the existing VRU equipment. The user will have to pre-register with Cointel to get access to the credit card recharge when recharge code 100 is dialled. Informative interactive voice prompts will be provided to assist the user during the credit card recharge transaction. The user will enter a Personal Identification Number ("PIN") used to identify the user and credit card to be used. The user will have the option to select the recharge amount from a set of possible recharge denominations. This information is forwarded to the banks for verification. Once this transaction is validated the user's Pre-Paid account is updated on the IN system."

[57] Gathercole enlarged upon the mechanics of this system with technical details of its operation. The intention of the proposal was to improve on the voucher or scratch card system, where a subscriber purchases a voucher containing a number that is fed into the network directly from the handset for the purpose of providing additional airtime. He made the point though that whatever recharge method is used certain identical information is transmitted within the system for the purpose of crediting the subscriber's account on the network. Thus, he stated:

"Between the Tandem and various IN platforms there is a credit instruction method that is sent. Remember the IN's account, the subscriber's account, sits on the IN platform itself and irrespective of whether you are doing a recharge with a voucher or a credit card recharge or a bank ATM recharge you have three main fields that gets filled in this message. The one is a transaction ID for each recharge. You have a unique transaction ID. The other one is the MSI's (the telephone number). And the third main field is the amount of money that you actually want to put in."

He went on to explain the distinguishing feature of the credit card recharge:

"Yes, we do a credit validation at the bank and we are using a standard banking protocol called ISO 85/83. That is what the ATM's use to talk and what banks use to talk. So I will fire off an 85/83 message to the bank. The bank will validate the credit card. Has he got enough funds in his account; is it blacklisted or stolen, or whatever; and if the bank is happy they send me a return message and says yes, the transaction is valid. Whatever the recharge denomination that the subscriber chose during the VR (VRU) session, that amount of money gets put into the IN account which is a totally separate, different platform."

[58] Cointel's involvement in the arrangement is now limited to the registration, Ecnet does the bank switch, and Vodacom the actual recharge.

[59] Gathercole confirmed that the system has not changed since 1998.

[60] Gathercole went on to explain that the subscriber details - name, ID number, address, etcetera - are maintained on the Cointel system and that such is not interrogated by the Vodacom system when uploading the

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recharge, because the PIN issued by Cointel is sufficient. The transactional flow analysis in exhibit "B33" (at "B90") explains the verification of the subscriber details under the Autocharge. After the subscriber has chosen the credit option in response to the VRU prompts, provided the subscriber is registered and not blocked for some reason, he will enter the PIN. This PIN will be validated against the associated MSISDN (telephone number)/credit card relationship on the tandem computer system. If the PIN is correctly entered, the application is provided with the credit card information to be used during this transaction. The tandem application then determines the credit value allocated against the credit card. This then is the manner in which the subscriber is identified and verified from the database within the tandem. Thus, the integers related to remote identification and verification, as stipulated in claims 1, 14 and 15 of the patent in suit, are clearly present in the Autocharge system.

[61] When Gathercole was asked whether integers (d) and (e) of claim 1, integer (d) of claim 14 and integers (e) and (f) of claim 15 were similarly present, ie the selective providing to the subscriber with an enabling code which, when fed into the network, provides the subscriber with airtime credit which allows communication via the network to a predetermined extent, he replied: "I understand that as the voucher, my lord." By contrast, he regards the PIN used in the Autocharge as a password not as an enabling code. In this regard he remarked:

"By feeding it into the network it does not automatically provide you with anything, there is a whole bunch of actions that actually need to take place. If your lordship will remember that there was a credit threshold, if reached by maximum credit threshold I am not going to even play you any form of recharge prompts, you might not even have money in your account, your credit account so might be blocked, you might be suspended. By simply feeding in the password does not guarantee you that you are going to get any form of money for that denomination" (*sic*).

[62] Exhibit "B103-113" explains the voice response unit ("VRU") functional specification for electronic recharge. It describes the actual format of the file or message sent by the VRU to the IN platform to credit the subscriber's airtime account. Gathercole testified that the format of the data has not changed since inception, only the method of delivery. One has to do then with communication by one computer with another (similar to the transmission of e-mail). And, as will be seen presently, the plaintiff relied on this aspect in support of his contention that integers (e) and (f) of claim 1 are disclosed. This communication, he asserted, constitutes the enabling code in both the Autocharge and hybrid systems. Gathercole's rejoinder to that proposition has assumed importance. He said:

"My lord as you can see there is no code in this thing at all. I mean it is purely a message transaction between one computer element and another computer element. The same message is used for any type of recharge that we do, whether it be a batch process which is the hybrid Autocharge, credit card, electronic ATM charge, voucher recharge, it is the exact same message that is actually sent, every time."

[63] It became apparent during the cross-examination of Rathilall that the plaintiff would rely on a technical document discovered by Vodacom entitled "Tecnomer Voucher and Credit Card Functional Specification" dated 9 October 2003 (exhibit "B145-221") to bolster his contention that

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Vodacom introduced improvements to its recharging methods and systems drawing on his invention after the priority date. He relied in particular on the following introductory paragraph:

"Vodacom is constantly striving to improve the existing recharge service. A huge step in achieving this is the local re-

writing of the existing interact code. This functional specification defines Vodacom's Tecnomer design of the voucher and credit card recharge product where users are afforded the ability to recharge their accounts by using a voucher or if registered for the credit card recharge service a user can recharge using their credit card. This functionality is provided via an IVR session by dialing a unique access code, where the user will be prompted to choose a specific recharge function according to current profile on the PPFPE."

The plaintiff's reliance on this statement for the point he sought to make was misplaced, as borne out by his ultimate concession regarding the credit card recharge Autocharge system and the rebutting evidence of Gathercole. The specification did not involve any functional change; it was aimed rather at an improvement in capacity and throughput. Prior to this improvement the system could only manage 90 simultaneous connections (subscriber's seeking a recharge); the new system allows for 1 800 simultaneous connections.

The case for infringement based on the hybrid prepaid contract

[64] The above summation is the evidence relevant to the alleged infringement by the Autocharge system. The aspects of it related to the enabling code have relevance to the hybrid contract. I accordingly turn now to deal with the evidence related to the case for infringement based on the hybrid prepaid contract. Here the plaintiff relied on the Product Concept Document exhibit "B239-261" dated August 2003. The document is stated to be Version 3 and makes reference to two prior versions, the dates of which are unknown to me because they were not discovered for the purposes of the trial.

[65] From the evidence, and particularly exhibit "B239-261", it can be accepted that the hybrid prepaid contract operates in the manner outlined earlier. However, it is necessary for present purposes to expand on certain of its technical aspects. The innovation hoped for with the introduction of the product was that it would combine the flexibility of a prepaid option and the convenience of a fixed-term contract for the supply of airtime (as opposed to "a pay as you go"). As already explained, subscribers choose a contract where they get a fixed monthly amount of airtime (the most popular selection being R135), and then have the option of purchasing additional airtime using prepaid vouchers or electronic recharge mechanisms to top-up, most usually when the fixed amount supplied automatically at the beginning of each month becomes depleted in the course of the month. The product concept document explains that the monthly airtime value will be a monetary value (not a specific number of minutes). The reason for this is that both the monthly airtime value and the prepaid balance are stored in the same account. Telephone calls first use the fixed monthly airtime value until depleted and then the top-up amount added by any recharge mechanism. There is no split between monthly recharges and additional top-up, as the same IN account is used.

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The call rates applicable will be the same for the monthly portion and the top-up portion; call rates will be charged at the same value.

[66] As explained above, after the various amendments, the plaintiff's case in relation to the hybrid system is that it infringes claims 1-3, 9-12, 14-19 and 24-28 of his patent.

[67] Gathercole clarified how the tandem computer runs a "batch job" monthly. An instruction is given and the programme looks through the registration table on the tandem for the hybrid subscribers (1 million). The operational function on the tandem will extract the subscribers, the airtime value for each (R135 for example), and will generate a transaction ID. The function will then extract this; call up the recharge programmes, which put the money into the subscriber account on the IN network, the only data involved being the MSISDN (cellphone number), the transaction ID and the airtime value. This, in his opinion, is not an enabling code. As he sees it, the plaintiff misunderstands the operation. The programme does not interrogate the bank to determine whether the subscriber has R135 in his account. The crediting of the network account occurs just after midnight of the last day of the month, while the stop order transactions with the bank occur the next day by means of a different programme. Should a stop order fail, a soft lock is placed on the subscriber account and the subscriber will be unable to use the phone. The batch job runs automatically every month. The subscriber does not have to take any action to effect the monthly recharge. It is done as a matter of course from the inception of the contract.

[68] While the hybrid contract certainly does involve some element of remote identification and verification, in the use of the network and the fact of the MSISDN being within the database, the recharge on a monthly basis, according to Gathercole, does not require the identification and verification of a subscriber's personal details (contained on the billing platform), seeing as the recharge occurs monthly as an automatic process that will carry on running as long as the subscriber's contract is valid. The subscriber has no further interaction once he has established his prepaid contract and set up the debit order.

[69] There was some debate between Mr *Puckrin*, counsel for the plaintiff, and Gathercole about whether the data transmitted to the IN network for the purposes of a recharge (the transaction ID, the MSISDN and the amount) constituted "a code". Gathercole defined the transaction ID as "a unique number that actually identifies the specific transaction". When asked why such did not constitute a code, he replied: "Because it does not do anything." By that I understood him to mean that it did not functionally enable anything. As he put it:

"A code, to my understanding, can either be numerical, it can be alpha, but the code takes on a certain functionality depending on what it is actually designed to do."

The purpose of a transaction ID is limited to identifying a transaction by means of a number, such being of value to mapping or following the progress of a transaction as it travels through the network.

[70] However, Gathercole conceded that the transaction ID, the MSISDN and the value on being transmitted to the IN network enabled the net-

work to update the correct subscriber account on the network, and thus working together had a functionality. When it was put to him that such data constituted a code, he qualified his earlier answer by stating that the data:

". . . was purely information applied to the IN and the functionality sits on the IN and it says I know when I get this message with these three fields in it, then I must update the account. So the functionality resided on the IN and not on the message."

Counsel pressed the point further. He referred to the 12 digit PIN code obtained on purchasing a voucher or scratch card in the "pay as you go" system, which Gathercole acknowledged to be a code fed into the prepaid front end ("PPFE"), which the PPFE in turn validated. Gathercole accepted as correct that the PIN code so fed in has no other function other than being recognised by the PPFE, which in turn initiated all further processes and action required to update the subscriber account. On this basis, it was put to Gathercole that the code sent in the batch process (under the hybrid system) has exactly the same functionality as the PIN code on the scratch card or voucher. To this Gathercole replied:

"Sir, the exact same message that is sent to the IN to actually update the account for, if it is for the batch, is exactly the same message that is sent if it was a voucher or scratch card that was used . . . There is no difference. The batch process actually just determines the amount and the validation process for the voucher determines the associated amount with that voucher. It is the same that goes to IN."

The abandonment of the case of infringement based on the Autocharge system

[71] At the close of his cross-examination of Gathercole, counsel for the plaintiff indicated that he did not propose to cross-examine the witness on the Cointel Autocharge system. He informed the court that his instructions were not to persist with the allegations in paragraphs [9.1] and [9.3] of the particulars of claim. He stated the reason for doing so as follows:

"The reason being we do not believe the integers are there, but more importantly the court has heard the evidence, the commercial ramifications of Cointel are just not worth prolonging this trial for another week and I am not going to ask further questions and I am not going to argue that the court should find an infringement based upon the Cointel system."

Thereafter the plaintiff was re-called in terms of rule 39(13) to give rebutting evidence on the issues of invalidity raised by the counterclaim.

[72] I will return to the question of invalidity later. But during the course of his cross-examination in rebuttal, the plaintiff confirmed in relation to the case for infringement based on the Autocharge system that he had reached the conclusion, after listening to the evidence, that the integers were not disclosed. In particular, he stated that after hearing Gathercole's evidence on the enabling codes he realised that the enabling code in the Autocharge system "was never there", since the Autocharge system had never changed from inception in 1998. When it was put to him that such a stance ignored Gathercole's evidence that there was no difference between the information transmitted in both instances of Autocharge and hybrid (such information the plaintiff claiming to constitute a code), the

plaintiff responded that there is a different procedure in place relating to the batch process that in his mind created an enabling code. His precise meaning remained somewhat obscure. However, later in the cross-examination, in response to the same question, he explained:

"Because there is a different transaction flow, for instance on the Autocharge side there is an in-time checking of the availability, checking of funds that comes back with transaction information from the bank. That transaction information is married to the instruction that is sent to the IN platform so that if there is a failure it can be checked at a later stage. The instruction that is sent to the IN platform from the prepaid front end (PPFE) where prepaid top up (hybrid) is concerned is actually sent without financial record information. As Mr Gathercole explained, it is an instruction containing the type of recharge, the value of the recharge and the telephone number and as he explained it has nothing to do with the financial instruction because it runs separately from each other and that is my stance."

[73] I will return to other aspects of the plaintiff's evidence when considering the argument on infringement.

[74] Mr *Bowman* submitted that the real reason for the plaintiff abandoning the allegations of infringement by the Autocharge system is because the latter evidently anticipated the patent in suit. Much of the plaintiff's case was aimed at establishing that the integers were present in the Cointel system. The defendants conceded the existence of the integers of remote identification and verification in relation to the Autocharge system. If integers (d) and (e) of claim 1, the enabling code, are found in the hybrid system, such being allegations with which the plaintiff persisted, and accepting Gathercole's evidence that the message transaction between the computing elements is the same message in all recharges, an infringement by the Autocharge system could have been established by virtue of all the integers being present, but a finding of invalidity on the basis of anticipation would have followed. The unassailable evidence of both Rathilall and Gathercole established that, whether or not the integers were present, the Cointel system was in operation from a date prior to the priority date of the patent. The plaintiff abandoned the cause of action because that case could not answer the case of prior use, which would have meant the patent was bad.

[75] I agree with Mr *Bowman*'s submission. Moreover, the changing and evolving nature of the plaintiff's case throughout and before the trial redounds negatively upon his credibility. Such inclines me to accept also Gathercole and Rathilall's account of how the Cointel Autocharge operated initially, as corroborated by much of the contemporaneous documentary evidence, in preference that of the plaintiff. However, given the concession regarding the Autocharge system, and because of my ultimate conclusion, I see no call for a

definitive finding, and no more need be said on that score.

Determination of the issue of infringement by the prepaid hybrid contract

[76] In view of the plaintiff's about face in respect of allegations of infringement by the Autocharge system, it is only the issue of the infringement by the hybrid system that is left to be considered.

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[77] As stated at the outset, the determination of the question as to whether or not a plaintiff has proved an infringement of his patent turns upon a comparison between the article or process, or both, involved in the alleged infringement and the words of the claims in the patent (*Stauffer Chemical Co and another v Safsan Marketing & Distribution Co (Pty) Ltd and others* [1987 \(2\) SA 331](#) (AD) at 342D-E). The onus is on the plaintiff to prove infringement. The correct approach to interpreting a patent for the purposes of determining infringement or invalidity was spelt out by the Supreme Court of Appeal in *Monsanto Co v MDB Animal Health (Pty) Ltd (formerly MD Biologics CC)* [2001 \(2\) SA 887](#) (SCA) [also reported at [\[2001\] JOL 7939](#) (SCA) - Ed] at 891E-892G. The following are the applicable rules:

- (a) a specification should be construed like any other document, subject to the interpreter being mindful of the objects of the specification and its several parts;
- (b) the rule of interpretation is to ascertain, not what the inventor or patentee may have had in mind, but what the language used in the specification means, ie what the intention was as conveyed by the specification, properly construed;
- (c) to ascertain that meaning the words used must be read grammatically and in their ordinary sense;
- (d) technical words of the art or science involved in the invention must also be given their ordinary meaning, ie as they are ordinarily understood in the particular art or science;
- (e) if it appears that a word or expression is used, not in its ordinary sense, but with some special connotation, it must be given that meaning since the specification may occasionally define a particular word or expression with the intention that it should bear that meaning in its body or claims, thereby providing its own dictionary for its interpretation;
- (f) if a word or expression is susceptible of some flexibility in its ordinary connotation, it should be interpreted so as to conform with and not to be inconsistent with or repugnant to the rest of the specification; and
- (g) if it appears from reading the specification as a whole that certain words or expressions in the claims are affected or defined by what it said in the body of the specification, the language of the claims must then be construed accordingly.

[78] It is well known that our law of interpretation has moved beyond an overly literalist approach. The ordinary meaning of words cannot be ascertained by "excessive peering at the language to be interpreted without sufficient attention to the contextual scene" (*Jaga v Dönges NO and another; Bhana v Dönges NO and another* [1950 \(4\) SA 653](#) (A) at 664H [also reported at [\[1950\] 4 All SA 414](#) (A) - Ed]). The question always should be: what is the meaning applicable in the context of the particular document under consideration (*De Beers Industrial Diamond Division (Pty) Ltd v Ishizuka* [1980 \(2\) SA 191](#) (T) at 196E-F [also reported at [\[1980\] 3 All SA 447](#) (T) - Ed]). More recently, courts construing patents have evolved the contextual methodology to a more extensive purposive approach to

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interpretation, which seeks to discover "what were intended to be the essential elements, or the essence, of the invention, which is not to be found by viewing each word in isolation but rather by viewing them in the context of the invention as a whole" (*Aktiebolaget Hässle and another v Triomed (Pty) Ltd* [2003 \(1\) SA 155](#) (SCA) at 160B-F [also reported at [\[2002\] 4 All SA 138](#) (SCA) - Ed]). The court went even further in this case and held as incorrect the proposition that the context might be called in aid only to construe an ambiguous claim. It is no longer the case in our law of patents that "ambiguity is the open sesame to context". The courts in interpreting patent claims should have recourse to the full context and background of a specification in order to decide what the skilled addressee would have understood the claims to mean (*Vari-Deals 101 (Pty) Ltd v Sunsmart Products (Pty) Ltd* [2007] SCA 123 (RSA) [also reported at [\[2007\] JOL 20698](#) (SCA) - Ed] at paragraph [11]). In *Kirin-Amgen Inc and others v Hoechst Manon Rousel and others* [\[2005\] 1 All ER 667](#) (HL) at 680, Lord Hoffmann stated the principle thus:

"Construction, whether of a patent or any other document is of course not directly concerned with what the author meant to say. There is no window into the mind of the patentee or the author . . . Construction is objective in the sense that it is concerned with what a reasonable person to whom the utterance was addressed would have understood the author to be using the words to mean . . . What the author would have been understood to mean by using those words is not simply a matter of rules. It is highly sensitive to the context of and the background to the particular utterance."

[79] The dispute between the parties in the present case, now considerably narrowed, concerns solely the construction of the term "enabling code" as used in the integers of claim 1, 14 and 15 (as well as some of the dependent claims). As the evidence unfolded it became apparent that the plaintiff would seek to interpret the term "enabling code" to be the message containing the following data: the MSISDN, the amount of airtime, and the transaction ID ("TID"). The plaintiff added another dimension to this in argument. He argued that the claims, particularly integers (d) and (e) of claim 1 should not be construed to mean that the enabling code needs first to be sent to the subscriber and that the subscriber should feed the enabling code into the

network in order to obtain airtime credit (a system or method he described for convenience as a "triangular code system"). In his submission, it is not necessary for the enabling code to be returned to the subscriber and for the subscriber to feed it into the network to be provided with airtime. He contended that the enabling code can be sent directly to the subscriber's account on the intelligent network ("IN") - this he called a "linear code system".

[80] The defendants submitted on the contrary that a proper interpretation of claim 1 revealed that the claim provided for a sequence of steps in the method of enabling use of a communication network to which the claim relates. The first step, integer (b), is that the subscriber must be remotely identified; the second, integer (c), requires there to be verification of the subscriber's details stored in a database; the third, integer (d) requires selectively providing the subscriber with an enabling code with the function provided for in integer (e); and the fourth step requires that the enabling code, after having been provided to the subscriber, must when fed into

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the communication network (clearly by the subscriber who has been provided with the enabling code), provide the subscriber with airtime which allows communication via the network to a predetermined extent, such extent corresponding to the value of the enabling code. The defendants thus submitted that the enabling code must be a value carrying enabling code which the subscriber can feed into the communication network.

[81] The plaintiff contended that there is nothing in the body of the specification or the context that supports the defendants' construction of the claim to require a sequential, triangular code system. In support, he referred to at 5 of the specification which states that the method may include obtaining the enabling code from an enabling code dispensing means which has a stock of enabling codes in electronic form. Such, to my mind, does not buttress the plaintiff's interpretation. On the contrary, it points to a sequential triangular arrangement involving the subscriber obtaining the code from an enabling code dispensing means, such as an ATM, which has a stock of codes in electronic form.

[82] In addition, relying on dictionary definitions of enable ("to make able") and code ("a system used for brevity or secrecy of communication, in which arbitrary chosen words, letters or symbols are assigned definite meanings"), the plaintiff submitted that the term requires no more than that a series of symbols transmitted to the IN causes something to happen. Such was the case in the hybrid, he said, as was evident in the debate about the functionality of the message that took place between counsel and Gathercole during cross-examination.

Excessive peering at the language in this way in the present case, to my mind, divorces the claim from its context. The immediate textual context of the concept of an enabling code, as used in claim 1, is found in claims 10-12, being subsidiary claims to claim 1. They include the obtaining of enabling codes from a supply of enabling codes (claim 10), including selecting a voucher from a stock of vouchers *on which* the enabling codes are provided (claim 11), or from enabling code dispensing means which has a stock in electronic form (claim 12). The relationship between the voucher and the code as reflected in claim 11 accounts for Gathercole's understanding (as a skilled addressee) that the enabling code was data of the kind normally provided on a voucher in the "pay as you go" system to a subscriber for the purpose of the subscriber, rather than a computer, feeding it into the network. Similarly, the final paragraph of the specification clarifies the object or purpose of the invention to be:

"an enhanced method of, and system . . . for enabling use of a communication network *by* a subscriber. The method enables dispensing of enabling codes or vouchers to a cellular telephone user remotely without the need for the subscriber physically to obtain a voucher from a service provider."

What the invention aims at is the substitution of the voucher by the provision of the same information to the subscriber by different means. The idea that came to the plaintiff was to find a method whereby the need to stop and purchase a voucher could be obviated. His idea was that the information to be fed into the network could be transmitted to him by other means. Both the body of the specification and the other claims (10-12) substantiate that. There is no reason why guidance may not properly be obtained from a subordinate claim (as part of the textual

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context) on the true construction of the antecedent claims to which it is appended (*Glaverbel SA v British Coal Corporation and another* 1995 RPC 255 (CA) at 281).

[83] The reasonable person familiar with the state of the art would have understood the claims to be aimed at that end. The plaintiff, himself a reasonable addressee, albeit indirectly the author, confirmed that such was indeed the idea and object of the invention during cross-examination in the following exchange:

"*Counsel:* So the invention is going to be applied to that recharge, buy the voucher, type in the PIN and when it is exhausted, you buy another one. Now your invention is addressing an alternative way of doing that. Is that correct?

Plaintiff: That is correct, my lord.

Counsel: The idea as we understand it; is to replace that old voucher with one that can be purchased safely but remotely.

Plaintiff: That is correct my lord."

[84] The plaintiff earlier in his cross-examination conceded that the specification and the claims provided for a sequence of steps which must be carried out in the method in a particular order and that the enabling code

has a particular characteristic, it is a value carrying enabling code.

- [85] Moreover, the hybrid contract system did not solve the problem which led the plaintiff to conceptualise his invention in the first place. Were he to travel today through North West in the middle of the night and his R135 monthly airtime recharge were to become depleted he would be in exactly the same position as he was that night in late 1999. He would still need to top up either by means of a voucher, scratch card, ATM top-up or credit card Autocharge. The hybrid contract does not embody the inventive concept that came to the plaintiff's mind that night. The Autocharge service is more in line with what he had in mind.
- [86] It is permissible also to have regard to the manner in which the plaintiff implemented his invention in the Prepaid Online system as part of the extra-textual context, or background circumstances, demonstrating the purpose of his patent. The marketing proposal (exhibit "A213") states that "subscription enables the end user to purchase prepaid airtime vouchers directly from their handsets" and that "all prepaid vouchers are delivered to the end user by SMS". The plaintiff's evidence accorded with what is set out in the proposal. This discloses that up to the time of trial the plaintiff considered the enabling code of his invention to be an enabling code of the kind linked to an airtime voucher.
- [87] Besides all of that, I am persuaded that the plaintiff changed his evidence regarding the sequence of the steps for the purpose of "shoe-horning" the prepaid hybrid system into the ambit of the claim. During his cross-examination on infringement he readily accepted the proposition put to him by counsel that the integers of claim 1 proceeded in sequence. During cross-examination in rebuttal, after he had dropped the case for infringement by the Autocharge service, he qualified this, saying that while there is a sequence "they do not necessarily have to be in the same order every time. . .". The likely, if not transparent, motive for this change or qualification was to fit the hybrid contract into the claims in a manner in

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which integers (e) and (d) precede chronologically integers (b) and (c), which is what in fact happens on the monthly occasion of a recharge where the provision of the enabling code, the feeding into the network and the provision of airtime transpire before any identification and verification of the subscriber details and financial information; if the latter does indeed occur.

- [88] Finally, whereas I am prepared to accept that the communication of the message containing the data of the MSISDN, the TID and the airtime value comprises the transmission of enabling data with obvious functionality, I do not believe that such is the enabling code intended to be conveyed in the specification. The expression is first used in the opening paragraph of the specification which discusses the "pay as you go" in the prior state of the art. There it is said: "The voucher provides an enabling or PIN code that is fed into the network via the cell phone thereby to enable use of the network for the selected value." The code intimated by the term "enabling code" is the 12-digit PIN recorded on a voucher or scratch card fed into the network by the subscriber from his own handset. Such action and data (enabling by means of a code) precede the transmission of data within the network.
- [89] In the premises, I accept the submission of the defendants that no enabling code is fed into the network for the prepaid contract hybrid system, unlike the case with the code of a scratch card or electronic voucher. What the plaintiff would now have be the code is in fact a recharge instruction generated within the system on the tandem and sent within the system to the IN platform. There is no feeding into the network of this instruction. Integers (d) and (e) of claim 1 are therefore not present in the hybrid system, nor integer (d) of claim 14, nor integers (e) and (f) of claim 15. Moreover, with reference to integer (e) of claim 15 there is no stock of enabling codes in the hybrid system. The functional information that is transmitted to effect the monthly recharge does not come from a stock of codes, but is generated from the programme or the operational function on a timed basis.
- [90] Absent these integers, the contract prepaid hybrid system does not infringe claims 1, 14 or 15 of the patent or any of the subsidiary claims.
- [91] The defendants further maintain that integers (b) and (c) of claim 1, integers (b) and (c) of claim 14 and integers (c) and (d) of claim 15 regarding remote identification and verification are also not present in the hybrid system. Gathercole's evidence on these integers is somewhat ambiguous. When asked during his evidence-in-chief whether there is any provision for any identification of the subscriber and any verification, he replied that the tandem will know the MSISDN value, but from the contract it is possible to verify the subscriber details on record. He also acknowledged that there was an initial identification when the subscriber dialled 100 to activate the agreement. The plaintiff seized upon this evidence as indicating the presence of the identification and verification integers. I think not. The specification read as a whole conveys the impression that remote identification and verification occurs with each request for a recharge and is for the purpose of providing the enabling code. Gathercole's evidence that the hybrid recharge happens automatically, and can take place even while the cellphone is switched off, means

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that there is no simultaneous remote identification and verification on each monthly renewal. The information is not interrogated by the system at the time of recharge. The entire transaction is generated within the system and involves no action by or interaction with the subscriber. The plaintiff's case against the hybrid system therefore fails on integers (b) and (c) too.

- [92] In the result, the action for infringement falls to be dismissed.

Invalidity: Anticipation

[93] In addition to its plea denying infringement, as mentioned at the outset, Vodacom filed a claim in reconvention objecting to the patent in suit on the grounds of a lack of novelty and a lack of inventive step.

[94] [Section 61\(1\)](#) of the Act provides that any person may at any time apply for the revocation of a patent on various grounds, including the ground that the invention concerned is not patentable under [section 25](#) of the Act ([section 61\(1\)\(c\)](#)). [Section 25\(1\)](#) reads:

"A patent may, subject to the provisions of this section, be granted for any new invention which involves an inventive step and which is capable of being used or applied in trade or industry or agriculture."

In terms of the other provisions of the section, an invention shall be deemed to be new if it does not form part of the state of the art immediately before the priority date of any claim to that invention ([section 25\(9\)](#)). The state of the art shall comprise all matters (whether a product, a process, information about either, or anything else) which have been made available to the public (whether in the Republic or elsewhere) by written or oral description, by use or in any other way ([section 25\(6\)](#)). The state of the art shall also comprise matters contained in an application, open to public inspection, for a patent, notwithstanding that the application was lodged at the patent office and became open to public inspection on or after the priority date of the relevant invention, if that matter was contained in that application both as lodged and as open to public inspection; and the priority date of that matter is earlier than that of the invention.

[95] The proper approach to determining an objection of anticipation, or a lack of novelty, was enunciated by Trollip JA in *Gentiruco AG v Firestone SA (Pty) Ltd* [1972 \(1\) SA 589](#) (AD) at 646B-H as follows:

"I turn now to the objection of anticipation. It relates to the claims and not the description of the invention in the body of the specification . . . Hence the particular claim must be construed to ascertain its essential constituent elements or integers. For the purpose of this objection the claim so construed is assumed to be inventive . . . The prior printed publication or patent alleged to be anticipatory is then construed. As Blanco White, *supra* says at 101:

'The question whether a claim has novelty over what is disclosed in an earlier document is primarily one of construction of the two documents.'

The two documents are then compared to ascertain whether the prior patent was granted for, or the prior printed publication 'describes' the same process, etc. as that claimed. Prior patenting will be dealt with later. In regard to a prior publication, the ordinary meaning of 'describe' means

'to set forth in words or recite the characteristics of . . .'

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Hence for it to 'describe' the invented process etc., it must set forth or recite at least its essential integers in such a way that the same or substantially the same process is identifiable or perceptible and hence made known, or the same or substantially the same thing can be made from that description. 'Substantially the same' means practically the same, or, . . . the same 'for the purposes of practical utility'; ie substance and not form must be regarded. Consequently, if on the comparison of the two documents it appears that the same or substantially the same process, etc., is described as in the above sense in both, the claim has been anticipated and is not novel; conversely, if the description in the prior document differs, even in a small respect, provided it is a real difference, such as the non-recital of a single essential integer, the objection of anticipation fails."

[96] Extrinsic evidence is admissible to prove the meaning of technical terms or the prior state of the art in so far as it is relevant for the proper construction and application of the document. However, the opinions of an expert that a document does or does not anticipate a claim of the patent in suit should be disregarded as such is obviously a matter of interpretation for the court (*Gentiruco, supra*, at 646H-647A).

[97] In the claim in reconvention Vodacom alleged that the patent in suit was not new in that it formed part of the state of the art immediately before the priority date of the claims to the invention and stated its intention to rely on five processes, products etcetera that constituted, in its view, matter which was made available to the public immediately before the priority date thus forming part of the relevant state of the art. These were:

- (i) the system and method of recharging airtime used commercially by Cointel (Pty) Ltd and Vodacom from about June 1998 ("the Autocharge system");
- (ii) South African patent 99/0794, referred to in evidence and argument as the "I Touch" patent;
- (iii) the "pay as you go" or prepaid voucher system used in South Africa by Vodacom from about 1994;
- (iv) WO 98/47112, referred to as the "Miller" patent; and
- (v) WO 96/41462, referred to as the "EDS" patent.

[98] During the course of the trial, Vodacom abandoned its reliance on the "pay as you go" system and qualified its reliance on the "Autocharge system". It stood firm in its reliance on the three other documents, though the dispute in that regard was narrowed considerably by the expert evidence.

[99] Vodacom's contention that the patent in suit was perhaps anticipated by the Cointel Autocharge system was predicated upon a possible infringement on account of a linear (as opposed to triangular) enabling code being found to be part of the prepaid hybrid system. If, on the other hand, the patent is construed to mean that the enabling code needs to be sent to the subscriber and that the subscriber should feed it into the network ("the triangular code system"), as I have in fact construed the claims, then it is common cause between the parties that there would be no anticipation by the Autocharge system. That concession needs brief elucidation. It is common cause that the Cointel Autocharge system discloses the features of integers (a), (b) and (c) of claim 1. Had I found integers (d) and (e) disclosed in the prepaid hybrid system, which I did not, it would

have become necessary to determine, in the light of such infringement, whether the patent had been anticipated by the Cointel Autocharge system (not the hybrid contract). It was submitted on behalf of Vodacom that there is no difference between the Autocharge system and the prepaid hybrid contract in so far as these integers have relevance and hence that the patent in such event would be bad for lack of novelty because of the prior use of the Cointel Autocharge system. There seems to me to be merit in that submission. However, because of my finding on the question of infringement, there is no need to pronounce definitively upon it.

[100] It remains though to consider whether the I-Touch, Miller and EDS patents anticipated the patent in suit. I did not understand Vodacom to abandon its claims in reconvention in the event of a finding of non-infringement, and hence an appropriate determination is required.

Anticipation by the I-Touch patent

[101] The I-Touch patent was lodged on 2 February 1999; that is a year before the priority date (24 May 2000) of the patent in suit. The specification states that the I-Touch patent relates to a method of assessing electronically the status of a client device as a prelude to charging the client with a store of resources enabling it to operate, in particular as a member of a network of such devices. In particular, it relates to the clearance, for online electronic charging, of a prepaid cellular number. Pre-paid vouchers are available for purchase by users of services such as those of cellular telephony, electricity and other utilities. In regard to cellphones, printed vouchers are dispensed by sales agents to their customers. The agent requires clearance from a principal before it may dispense valid vouchers. The specification provides a summary of the invention in the following terms:

"According to the invention, a method of electronically allocating a resource to a client device includes the steps of

- . Providing a client device and a service platform capable of communicating with each other, the device being remotely operable with respect to the service platform;
- . Setting criteria for defining a group of permitted client devices that are in good standing in relation to the service platform;
- . Determining a group of permitted such devices that meet such criteria;
- . Causing the device to transmit and the platform to receive a signal;
- . Causing the platform to determine, from such signal, whether the device is a permitted device and, if so,
- . Causing the platform to enter into a transaction with the device whereby the device communicates a resource allocation requirement to the platform;
- . In response thereto, causing allocation of a quantum of the resource to the client device and
- . Causing the platform to communicate advice of such allocation to the device."

[102] The I-Touch patent comprises 43 claims. As stated in the *Gentiruco* case, *supra*, the objection of anticipation relates to the claims of the patent in suit and not the description of the invention in the body of the specification. The alleged anticipation by the I-Touch document of the claims of the patent in suit is dealt with in some detail in the summary of the opinions of Messrs Vlok and Gathercole, filed on behalf of Vodacom in terms

of rule 36(9)(b), and confirmed by Gathercole in oral testimony. The plaintiff in his rule 36(9)(b) notice has narrowed the range of the dispute considerably. He deals with the I-Touch patent in paragraph [7] of the notice. He avers therein that he has read and understands the document and would testify that the I-Touch patent did not disclose a subscriber database whereby a subscriber's details are remotely verified and also did not disclose a database which includes a plurality of subscribers, and consequently the invention as claimed in the patent in suit is not disclosed in the I-Touch patent. The integers of the claims of the patent in suit to which these assertions relate are integer (c) of claim 1 and integer (d) of claim 15. Claim 1(b), we may recall, speaks of a method including "remotely identifying the subscriber" with claim 1(c) including the verification of subscriber details with reference to the subscriber details stored in a subscriber database; and claim 15(a) involves a system including "verification means for verifying subscriber details with reference to the database". The database is that contemplated in integer (b) of claim 15, namely: "a database including data on a plurality of subscribers requiring use of the communication network". Claim 16 adds an integer that the database includes financial data on each of the subscribers, the system being configured to update the database to reflect each transaction with each subscriber. The plaintiff confirmed during his testimony that the dispute regarding the I-Touch patent was limited to such extent.

[103] In the body of the I-Touch specification (at 4) we find the following statement:

"In a still further preferred form of the invention, the method includes the step of forming a database containing information on the group of permitted client devices. The database may include information providing unique identity-related information in respect of each permitted device. Further, according to the invention, the signal from the device includes an electronic mailbox number and a personal identity number (PIN)."

At 6 the specification elaborates:

"The platform service will request and check the caller's MSISDN, so as to establish whether the calling device is being operated by a permitted caller. If so, the service checks the mailbox number and PIN entered by the caller. If these are accepted by the database server, the system presents the caller (via the device) with a menu of options,

one of which is to require a voucher PIN."

Additionally at 4-5 the specification states:

"The system comprises a platform capable of communicating remotely with the device and a database server having a database containing information relating to a group of permitted devices defined according to predetermined criteria. The platform is accordingly programmed to extract data from the database which relates to a device with which it is communicably linked in use, so as to establish the standing of such device in relation to the platform, receive and process a signal emanating from the device, allocate a required resource to such device, and communicate advice of such allocation to the device."

[104] These descriptions are in turn recited in the claims of the I-Touch patent. Claims 4, 5 and 7 read respectively:

"4. A method according to any one of the preceding claims comprising the step of forming a database containing information on the group of permitted client devices.

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5. A method according to claim 4 wherein the database includes information providing unique identity-related information in respect of each permitted device.

...

7. A method according to claim 6 comprising further steps of capturing data relating to a banking account associated with the client device, generating a debit order file in a format required by a participating bank, sending the file to such bank electronically and receiving a result file from the bank reporting on each transaction."

Claims 30-31 portray a system comprising a database server connectable and in communication with a platform having a database containing information related to a group of permitted devices and wherein the platform is programmed to extract from the database data relating to a device in order to establish the standing of the device with respect to (for the purposes of) the allocation of the resource.

[105] Considering the stance taken by the plaintiff in his evidence, it would seem that the parties are in agreement that checking the caller's MSISDN, so as to establish whether the calling device is being operated by a permitted caller (at 6 of the specification and claim 1(e) of the I-Touch patent), constitutes "remotely identifying the subscriber" and thus that the I-Touch patent describes integer (b) of claim 1 of the patent in suit. The entering of a mailbox number and PIN by the caller in the first instance to cause the platforms to determine whether the device is a permitted device (claim 1(e) of I-Touch) and secondly for forming a database (claim 4 of I-Touch) amounts to "verifying subscriber details with reference to the subscriber details stored in a subscriber data base". The subscriber database in claim 4 of the I-Touch patent is quite evidently a database which includes information providing unique identity-related information in respect of each permitted device with the purpose of verifying subscriber details. Integer (c) of claim 1 of the patent in suit is accordingly disclosed in the I-Touch patent. Integer (d) of claim 15 of the patent in suit is similarly disclosed by virtue of the I-Touch platform being capable of communicating with permitted devices after determining the status of the device through the verification means and database of unique identity-related information included on the platform.

[106] Seeing that the plaintiff has restricted his defence to the claim of anticipation by the I-Touch patent to the alleged non-disclosure of integer (c) of claim 1 and integer (d) of claim 15 (which I have just found is not in fact the case), he accepts that the integers of all the other claims are indeed disclosed. That being so, the conclusion is inescapable: the I-Touch patent anticipated the patent in suit.

Anticipation by the Miller patent

[107] It is next necessary to decide whether the Miller patent has anticipated the patent in suit, the priority date of which is 1997. In terms of its specification, the "invention relates to a method for electronically vending, distributing, recharging and/or replenishing prepaid value, and a vending machine as well as a network for use therein". The object of the invention is stated to be the provision of "a novel method of electronically

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vending, distributing, recharging and/or replenishing prepaid value and a vending machine for use in such method". In the summary it is stated:

"According to a first aspect of the invention there is provided a method for electronically vending prepaid value including the steps of offering prepaid value for sale to a purchaser on an electronic network, the network enabling communication electronically between the purchaser, an independent financial institution and computerized managing means for managing the sale of prepaid values."

The Miller patent comprises 11 claims.

[108] The plaintiff narrowed the scope of dispute in his rule 36(9)(b) statement by limiting himself to the contention that the Miller patent did not disclose a method or system by which a subscriber is remotely identified (integer (b) of claim 1); nor a subscriber database or a database which includes a plurality of subscribers (integer (c) of claim 1 and integer (b) of claim 15).

[109] As I read the claims of the Miller patent, there is no explicit disclosure of a method or system by which a subscriber is remotely identified. However, claim 1 is extensive in its reach. It reads:

"A method for electronically providing prepaid values including the steps of providing prepaid values to purchasers by means of an electronic managing means for managing the provision of prepaid values electronically to a network

device at a point of sale on an electronic network, the network enabling communication electronically between the point of sale and the managing means; requesting a specific prepaid value from the managing means; transmitting payment data to the managing means, enabling the managing means to credit a beneficiary account; and providing reference detail about the specific prepaid value provided to the point of sale."

The claim envisages electronic communication between a managing means and a network device at a point of sale on an electronic network for the purpose of providing prepaid values of one kind or another. The idea incorporates a network capacitated to enable communication between the point of sale (or purchase) and the managing means for the purpose of transmitting payment data to the managing means and the provision of a requested prepaid value to the device. The element of remoteness is thus obviously present. The issue though is whether the patent or publication discloses a method of remote identification of the subscriber. To the extent that there may be ambiguity or uncertainty, it is permissible to have regard to the context, and in particular the body of the specification, not only to interpret the claim but also to determine the broader question of whether the process patented in the patent in suit has been previously described. At 15-16 of the specification we find the following narrative:

"In the cases of a personal device being the transaction medium the payment process will be via a pre-requested banking relationship unless the same technology is present as is found in the public access devices. In this case the customer will have pre-registered a personal identification object coupled with an access code (in the case of a cell phone it will be the phone number of the phone transmitted from the phone as part of call liner identification and a password)."

I agree with the submission made on behalf of Vodacom that "the call liner identification" using the phone number is the step of remotely

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identifying the subscriber and hence that integer (b) of claim 1 of the patent in suit is disclosed in the Miller patent.

[110] The next question is whether integer (c) of claim 1 and integer (b) of claim 15 of the patent in suit are disclosed; these integers being a method verifying subscriber details with reference to the subscriber details stored in a subscriber database, and a system including a database including data on a plurality of subscribers requiring use of the communication network. Here too, the claims of the Miller patent make no specific reference to "a subscriber database", but a purposive and common sense reading of the claims reveals that such a database is an integral and essential component of the method and system described. Claim 2 adds the following integer:

"The method as claimed in claim 1 wherein the provision of prepaid values is for any one of the purposes selected from the group consisting of electronic sale, electronic distribution, electronic recharge and chip card replenishment of such prepaid values."

Claim 5 adds:

"The method as claimed in claim 2 including the step of pre-registering the network device, the purchaser and the managing means in accordance with at least one of the so-called SET and SSC protocols for electronic sale via the so-called internet."

It is not immediately clear to me whether this claim intends pre-registration by the internet and the sale and distribution of prepaid values by various means or whether the intention is to restrict pre-registration of devices for the purposes of electronic sales effected by means of the internet. Whatever the case, it is clear from references in the body of the specification that pre-registration is an integral component of the method and system (see the discussion above concerning integer (b) of claim 1). That this is so is borne out by the description in the specification of the Computer Managing Means ("the switch") the key component of the process. It is explained as follows:

"*Computer Managing Means ('The switch')*: This is a computer that provides a number of services in the prepaid processing cycle. The following is a breakdown of the services available via the switch:

Network management: the switch manages the network where it is able to consolidate the state of health of all the machines from which maintenance calls can be scheduled. In addition to managing the maintenance process on the hardware, the system also provides statistics in support of SLA management.

PIN Management: The PIN is an identification number that is unique and is used by the client to effect the recharge of the prepaid value on completion of the sale. The switch is the custodian of all the PINs that are stored for sale to the public. These PINs are transported to the switch either via magnetic media or via a network link.

Distribution: The switch is the central point from which data and software are distributed to the devices attached to the network for the processing of the prepaid value.

Financial Processing: The switch provides connectivity into the banking systems where payment for the prepaid value is realised. Apart from the transmission of data between Cell f Service and the bank, the switch also has extensive journalising and reconciliation capabilities. These added features are a key

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component in the process of settlement between the bank and the parties involved in the sale of the prepaid value.

Security Management: The switch provides for the secure management of the environment by ensuring that security zones between the components of the system are populated with encryption keys. Apart from the distribution of the keys the system has its own encryption capability and it is able to verify that data sent and received at the switch is correct."

[111] There is further discussion of this capacity at 16-17 of the specification, where it is stated:

"There are two basic conditions that are dealt with at the switch with respect to the banking interface. The first is the traditional banking process where either the banking card and its PIN are available or there is a pre-registered relationship between the customer and his banking details and the second is where the transaction has already been authorised by a chip card. The details of the two options are:

Where the banking card or a pre-registered relationship exists, the switch will format a payment request to the bank.

Where the transaction has already been approved by a chip card the message that is constructed for transmission to the bank will not be an approval request but rather information for accounting purposes."

[112] From the above, therefore, it is evident that a database is integral to the process. The password referred to in claim 4 of the patent in suit in connection with integer (b) of claim 1, as a means of remote identification, is used to verify the phone number or the subscriber's details. Because the customer in the Miller patent has a pre-registered relationship, it is self-evident that subscriber details comprising the phone number and banking details will be stored in a database on the switch. As appears from the description of the Computer Managing Means, the data is necessary for banking purposes and the sale of the prepaid values, and hence "the switch also has extensive journalising and reconciliation capabilities". Those capabilities would be nothing short of redundant were they not to operate upon and in relation to a subscriber database including a plurality of subscribers and a method of verifying subscriber details.

[113] For those reasons, I am persuaded that integer (c) of claim 1 and integer (b) of claim 15 of the patent in suit are disclosed in the Miller patent. Once again, bearing in mind that the plaintiff has restricted his defence to the counterclaim of anticipation by the Miller patent to the non-disclosure of these two integers, a finding that they are indeed present is in effect a finding that the same or substantially the same process (method and system) is identifiable or perceptible and hence made known and part of the state of the art immediately before the priority date of the claims of the plaintiff's invention.

Anticipation by the EDS patent

[114] The field of the invention of the EDS patent (priority date 7 June 1997) is set out in its specification to be:

"The present invention relates generally to prepaid phone services, and more particularly to a system and method for electronic dispensing of a receipt reflecting prepaid telephone services to be used by customers in place of correct prepaid telephone cards, including electronic debiting of an account for costs associated therewith."

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[115] The plaintiff's position, as stated in his rule 36(9)(b) notice and confirmed in his testimony, is that the EDS patent does not provide for a remote identification of subscribers or a method including verifying subscriber details with reference to the subscriber details stored in a subscriber database. Mr *Puckrin* submitted that the EDS patent has specific, restricted application to vending machines. In support of this, he relied on the abstract summary of the EDS patent. In terms of regulation 31 of the Patent Regulations promulgated by Patents Act [57 of 1978](#) (GG 6247 GN R2 470, 15 December 1978) the abstract should not be used to interpret the scope of the claims of a patent for the purpose of deciding the issue of an infringement. There is perhaps less justification for ignoring it when dealing with the question of anticipation and the prior state of the art, which includes all information made available to the public. The abstract reads as follows:

"A system and method for electronic purchase of prepaid telephone services is provided. An initiating terminal (110) receives input of a customer's request to purchase a specified amount of prepaid telephone services and receives input of the customer's designation of a financial account from which to electronically debit the price of such purchase. A central terminal (140) receives these inputs from the initiating terminal to, in turn, print on a receipt and provide to the customer. This receipt is then used instead of a telephone card to obtain telephone services up to the specified amount. Such receipt may also detail instructions and an authorization number, such as a personal identification number or PIN, to initiate the prepaid telephone service. The system and method of the present invention also preferably transfers the funds from the appropriate demand or credit account to pay for the purchased telephone services. An additional, separate Regulation E-type receipt is preferably also printed reflecting the financial transaction."

[116] What is contemplated in the abstract is an initiating terminal receiving input of a customer's request to purchase a specified amount of prepaid value. However, it also receives input of the customer's designation of a financial account from which to electronically debit the price of such purchase. The most apparent point of difference between the EDS patent and the patent in suit lies in the former providing for the *print out* of an enabling code, whereas the preferred form of providing the enabling code in the patent in suit seems to be in telephonic form either in a voice message or SMS. The difficulty for the plaintiff, though, is that he did not put integers (d) or (e) of claim 1 in issue in relation to the EDS patent. Be that as it may, justice between the parties requires me to consider also whether integers (d) and (e) of claim 1 are disclosed in the EDS patent.

[117] Turning first to integer (b) of claim 1 of the patent in suit. On page 7 of the EDS patent we find the following description:

"For the sake of the following discussion, and unless otherwise stated, initiating terminal 110 will be an ATM. It should be understood that any of the initiating terminals ATM 110, personal computer 115, screen telephone with printing mechanism 120, or television with printing mechanism 125 could have been used instead. Moreover, initiating terminal 110 may be physically situated anywhere including a convenience store, a grocery store, a post office, a branch of a financial institution, a mall, or other location."

By the same token, given that the invention is not confined to an ATM, the location could also be at the home or office of a subscriber and, these days, even in a motor vehicle.

[118] At 8 it is stated:

"Initiating terminal 110 preferably permits the transmission of debit or credit card information with the associated PIN encrypted and encoded to ensure security as to the debit or credit card information."

The description continues at 9 as follows:

"Normally, the customer has already inserted a card to activate ATM 110. ATM 110 of the present invention preferably assumes that the card corresponds to the financial institution from which the customer will pay for the purchase. ATM 110 preferably inquires whether the customer wishes to have the funds taken from the customer's checking account, savings account, etc. The customer makes the desired selection. System 100 transmits the request to purchase prepaid telephone services, together with the financial account from which the customer desires to have funds electronically withdrawn to pay for such purchase, to central terminal 140."

[119] Other features of the computer systems and methods delineated in the specification include a card data input capability for reading magnetic stripes and cardholder authentication through a PIN (at 10). The input of the data also initiates a standard transaction message. It seems a matter of undeniable logic, therefore, that before a transaction is concluded, remote identification of the subscriber occurs through use of the card and PIN. Integer (b) of claim 1 of the patent in suit is thus disclosed.

[120] Does the method in the EDS patent include verifying subscriber details with reference to data in a database? Claims 5, 10, 11 and 12 of the EDS patent envisage the central terminal interacting with an existing database in order to effect the financial aspects of the transaction. First off, the central terminal seeks authorisation for the transaction. Claim 5 of the EDS patent provides for a ". . . system for purchase of prepaid telephone services of Claim 1, wherein said central terminal journals said transaction after obtaining authorisation for said request". Claim 10 makes clear that one of the steps of the method is "obtaining financial authorisation for said request by a central terminal"; claim 11 includes "the step of electronically debiting a financial account for the price of such purchase before said step of printing of a receipt"; and claim 12 adds the obviously integral step "for receiving input of a designation of a specified financial account from which to electronically debit the price of such purchase".

[121] The practical workings of the subscriber verification are explained more fully in the EDS specification as follows:

"Initiating terminal 110 determines that the subject transaction requires authorisation and sends a request for authorization to central terminal 140, thereby entering the next stage of the requesting transaction. While various implementations will occur to those skilled in the art, central terminal 140 preferably includes switch 145, authorisation unit 150, suspended journal files 170, and modular device handler 155 running on a Tandem-based platform for real-time processing, a SUN 2000 workstation for relational database 175 and MIS journal files 160, and an ESA9000 IBM mainframe for off-line (batch) processing, financial records maintenance, research, and reporting."

It continues:

"Central terminal 140 preferably has the appropriate linkages to debit card networks and credit card authorisation points to authenticate the card and the account information belonging to the customer desiring to make the purchase. Among the information provided to the authorisation agent is the

request for authorisation for the principal amount corresponding to the desired level of prepaid telephone services selected by the customer (referred herein as 'the principal'), together with the appropriate convenience or service fee, if any."

[122] While it seems that the subscriber database envisaged in the EDS patent would not be a part of the system's own platform, the capability to access the data, in what the experts referred to as "a relational database", sufficiently discloses integer (c) of claim 1 of the patent in suit, which speaks generally and abstractly of "verifying subscriber details with reference to . . . 'a subscriber database'". The relational database is a database in which details of subscribers are stored. Authentication of the card and the account information of a customer amounts to "verifying subscriber details" stored in a subscriber database. Integer (c) of claim 1 of the patent in suit is accordingly disclosed. To the extent that there are indications in claim 15 (integers (b), (c) and (d)) of the patent in suit that the contemplated database should form part of the system's own platform, I do not consider such (if it is indeed the case), to be a real difference leading to the conclusion that a substantially different process is described. The housing of the database on one platform or another is neither here nor there; the essence of the integer is the IT capability to access and process that data; and such characteristics are contained in the prior EDS patent.

[123] Claim 6 of the EDS patent makes it plain that the transmission of the data by the central terminal to the initiating terminal includes a PIN and such data includes instructions to access the prepaid value (claim 7). I agree with the defendants that the PIN referred to is an enabling code which is provided to the subscriber if sufficient funds or credit exist in the referenced account. Hence the enabling code is selectively provided to the subscriber with the result that integer (d) of claim 1 of the patent in suit is disclosed. Likewise, it is manifestly clear that when the PIN is fed by the subscriber into the network the subscriber will be provided with airtime allowing communication on the network. Integer (e) of claim 1 is accordingly also disclosed.

[124] In light of the above, and none of the other integers being in issue, the patent in suit must be held to have been anticipated by the EDS patent as well.

Obviousness: lack of an inventive step

[125] It remains to consider the question of obviousness. Strictly speaking, having found grounds for invalidity and

revocation in a lack of novelty, there may be no need to make a ruling on whether the patent in suit is invalid for want of an inventive step. Let I be mistaken in my finding that the patent has been anticipated, fairness to the parties dictates that I should still come to a decision on the matter.

[126] Lack of inventiveness is a ground for revocation under the Act by reason of the provisions of [section 25\(1\), \(6\)](#) and [\(10\)](#) read with section 61(c) of the Act. The cumulative effect of these provisions is that an invention is only patentable if it involves an inventive step. And an invention shall be deemed to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms, immediately

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before the priority date of the invention, part of the state of the art. In the application of these provisions to a particular case it is necessary to determine what the art or science to which the patent relates are, who the person skilled in the art is, and what the state of the art at the relevant date was. Thereafter the following inquiries should be made:

1. What is the inventive step said to be involved in the patent in suit?
2. What was, at the priority date, the state of the art (as statutorily defined) relevant to that step?
3. In what respect does the step go beyond, or differ from, that state of the art?
4. Having regard to such development or difference, would the taking of this step be obvious to the skilled man? (*Ensign-Bickford (South-Africa) (Pty) Ltd and others v AECI Explosives & Chemicals Ltd* [1999 \(1\) SA 70](#) (SCA) [also reported at [\[1998\] 4 All SA 453](#) (A) - Ed] at 79-80; and *Mölnlycke AB and another v Procter & Gamble Ltd and others* (5) (1994) RPC 49 (CA) at 115).

[127] The opinions of experts that a step is either obvious or not obvious are immaterial. Expert evidence is admissible and relevant only in respect of the nature of the step claimed to have been inventive, the state of the art as at the priority date relevant to that step, and the respect or respects in which the step goes beyond or differs from that state of the art (*Schlumberger Logelco Inc v Coflexip SA* [2003 \(1\) SA 16](#) (SCA) [also reported at [\[2002\] JOL 10174](#) (SCA) - Ed] at 27F-I).

[128] The defendants contend that the plaintiff's claim to an inventive step is confined to that made in his expert summary in terms of rule 36(9)(b) as confirmed by his oral testimony. In paragraph [11.3] he affirmed that he would testify "that the inventive step over the aforesaid state of the art is a system for the purchase of enabling codes including remotely identifying the subscriber from details in a subscriber database". Mr *Bowman* submitted that a proper reading of that statement means the plaintiff excluded from his definition in the summary of his inventive step the whole issue of the enabling code as a separate feature. As the plaintiff saw it then, the inventive step was simply a method of making the enabling code available by remotely identifying and verifying the subscriber from a database. To avoid any doubt, the defendants directed enquiries to the plaintiff for further particulars for the purposes of trial in terms of rule 37(4) for the purpose of clarifying the precise ambit of the dispute regarding obviousness. Paragraph [15] of the defendants' rule 37(4) notice reads:

"Ad Paragraph 11 of the Plaintiff's Notice in terms of rule 36(9)(b)

- (a) Given, that, as appears from the plaintiff's 36(9)(b) notice, it is not a part of the plaintiff's case that the enabling code of claims 1, 14 and 15 of the patent was not part of the state of the art prior to the priority date of the patent in suit, are the defendants to understand that what is alleged to be the inventive step of the patent is no more and no less than the ability to 'remotely identify the subscriber from details in a subscriber database' in the event of any 'purchase' of enabling codes?
- (b) If not, what else is alleged to constitute the inventive step of the patent in suit?

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(c) In any event, what is meant by the word 'including' in paragraph 11.3 of the plaintiff's 36(9)(b) notice?"

"Paragraph 11.3 of the Rule 36(9)(b) summary is clear and succinct and the Defendants require no further elucidation. The word 'including' bears its ordinary English meaning."

[129] The following exchange took place between the plaintiff and counsel during his initial cross-examination:

Bowman: Are you suggesting now that the enabling codes have something to do with your invention?

Plaintiff: Enabling codes itself my lord, is a means of enabling the delivery of a product.

Bowman: The enabling code has got nothing, as I understand your case, to do with your invention.

Plaintiff: Excuse me, my lord, are you asking that if I invented the enabling code?

Bowman: Yes.

Plaintiff: No my lord, I did not invent the enabling code.

Bowman: No, because we try to understand what you say about what it is that is the inventive step of your invention, it does not include as we understand it, the enabling codes *per se*. It is a system for their purchase that you claim to have invented.

Plaintiff: My lord my inventive step was to create the system that would allow a user of a communication network . . . to identify himself, to verify that subscriber, and then to issue him with, or provide to him an enabling code or codes that would allow him to use a resource . . . and that was the inventive step."

[130] It emerged in the course of the cross-examination of the defendants' expert that the plaintiff's case was somewhat at variance with the pleadings and his earlier testimony. It was put to the witness that the plaintiff would express the view that the combination of the features in the various claims of his patent constituted the inventive step: "Not any one of them, but the combination." The plaintiff confirmed this in his evidence-in-chief when he was called in rebuttal of the counterclaim. Then he stated the inventive step to be:

"It is the combination of all these elements in the technology that includes remotely identifying, verifying and providing a subscriber with an enabling code which when input into the network will give access to the network to a predetermined extent."

When asked whether the inventive step was limited to airtime on a cellular phone network, he replied that it was not but instead involved providing enabling codes for different uses and thus his invention had a wider application.

[131] Mr *Bowman* made something of the apparent shift in emphasis as to the inventive step. In my opinion, there is not much in it. Combination or no combination, airtime or other product, the plaintiff's stated inventive step consists of the provision of enabling codes to remotely identified and verified subscribers. That much has not changed. Moreover, it is stated in the opening paragraph of the specification that the invention relates to "a method of dispensing enabling codes". The difficulty for the plaintiff rather is that his claim to inventiveness is predicated upon his assertion

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that the Cointel Autocharge system was not in operation at the priority date of the patent in suit. Such quite evidently was the entire thrust of his case until such time as Rathilall gave his evidence. As I have found, and which now appears to be common cause, the Cointel Autocharge system was in fact operational before the priority date and included in its features were the integers of remote identification and verification from a subscriber database for the purpose of providing airtime. That being so, such formed part of the state of the art at the priority date, with the result that the plaintiff's "invention" was not a step beyond or any different to what existed as part of the state of the art. It follows that on such ground alone the plaintiff's claim is bad for obviousness as well; and that is so despite PPOL having had some measure of commercial success and the fact that Vodacom officials had early on evinced an exploratory interest in relation to it.

The order

[132] For those reasons the counterclaim for invalidity succeeds. In accordance with the prevailing practice the plaintiff should be afforded an opportunity to cure the invalidity. With regard to costs there is no reason why costs should not follow the result in relation to both the action for infringement and the counterclaim. The complexity of the matter justified the employment of two counsel.

[133] In the result, the following orders are issued:

1. The plaintiff 's action for an interdict restraining the defendants from infringing the patent in suit is dismissed.
2. The defendant's counterclaim is allowed and patent 2002/1924 is revoked, but the order of revocation is suspended for a period of three months from the date of this order to enable the plaintiff to seek such amendments to the specification and claims as he may deem necessary.
3. The plaintiff is ordered to pay the costs of the action and the counterclaim, including the costs of two counsel.

For the applicant:

CE Puckrin SC and R Michau instructed by *Van Niekerk & Van den Berg*

For the respondent:

LG Bowman SC and B du Plessis instructed by *Spoor & Fisher*