# The Enforceability of Open Source Software Licences: Can Copyright Licences Be Granted Non-Contractually?

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#### 1 Introduction

The birth of the Internet brought with it the ability to share information with anyone, quickly and easily, anywhere in the world. In the Internet's fledgling years, this ability was embraced, with computer programmers and scientists freely sharing information with one another in furtherance of their science. Inevitably, proprietary interests soon took hold, however, and the software that was once shared became the object of great wealth. Enter intellectual property law. Software was soon brought under the protection offered by copyrights, trademarks and patents, with the consequence that its underlying source code was closed off to the public. Ever since, however, there has been a virile backlash movement seeking a return to the open sharing of electronic information. This movement finds expression in the move towards open source software that is growing rapidly in the software industry, with great success in challenging traditional proprietary software houses.

This article will seek to establish a firm legal framework within which the open source software movement's primary tools, their software licences, can be enforced. First, the concept of open source software will be explained. After that, a general overview of open source licences will be provided followed by an analysis of the enforceability problems they face, with a view to overcoming the challenges levelled against such licences based on an alleged lack of contractual privity.

# 2 What is Open Source Software?

A computer programmer begins to develop a software application by generating its source code, a textual description of the application written in a specific programming language. A programming language is a vocabulary of instructions and syntax rules used to instruct a computer to perform certain

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<sup>&</sup>lt;sup>1</sup> Dana van der Merwe Computers and the Law 2 ed (2000) at 31.

<sup>&</sup>lt;sup>2</sup> Haupt t/a Soft Copy v Brewers Marketing Intelligence (Pty) Ltd & Others 2005 (1) SA 398 (C) at 410

functions. A computer cannot directly process this raw source code; it must first be converted into object code, which is 'machine readable'.<sup>3</sup> Although source code is understandable to humans, object code is not,<sup>4</sup> which makes object code extremely difficult to reverse engineer back to its source code form, so that co-opting or altering such object code is tricky if not impossible.

'Open source' is a label given to computer software that is made freely available for anyone to modify or redistribute, provided that the source code of the software is made freely available to others. This does not mean, however, that the software must be given away without charge. Open source software ('OSS') is the opposite of closed source software in that the latter is proprietary software owned and developed by a company or individual and is licensed and provided to consumers in the form of object code only under restrictive terms. Such terms normally require confidentiality of the code and prohibit reproduction, reverse engineering and redistribution of the software to third parties. Accordingly, the key principle of OSS is the public release of the source code under licence terms permitting broad rights to modify and redistribute the software.<sup>5</sup>

Faced with many software applications claiming to be OSS but not actually deserving the title, the Open Source Initiative, a non-profit OSS standards body, developed and maintains the Open Source Definition.<sup>6</sup> Accordingly, software must meet the following ten criteria in order to be deemed 'open source':

- Free redistribution must be permitted;
- The software must include source code and permit redistribution in source code as well as object code form;
- Modifications must be permitted, and also redistribution of such modifications under the same licence terms as the original licence;
- The licence may restrict source-code from being distributed in modified form only if the licence allows the distribution of 'patch files' with the source code;
- The licence must not discriminate against any person or group of persons;
- The licence must not restrict anyone from using the programme in a specific field of endeavour;
- The rights granted by the licence must apply to all to whom the programme is redistributed, without the need for execution of an additional licence;
- The rights attached to the programme must not depend on the programme being part of a particular software distribution;

<sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> GJ Lidovho 'The Internet and the Piracy of Copyrightable Computer Software in South Africa: Some Comparative Perspectives' (2006) 123 SALJ 338 at 342.

<sup>&</sup>lt;sup>5</sup> F Lawrence Street & Mark P Grant Law of the Internet (Release 10, 2005) at 14-2.

<sup>&</sup>lt;sup>6</sup> Kathy Bowrey Law and Internet Cultures (2005) at 83.

• The licence must not place restrictions on other software that is distributed along with the licensed software;

• No provision of the licence may be predicated on any individual technology or style of interface.<sup>7</sup>

## 3 OSS Licensing

Just like proprietary software producers, OSS producers use licences when distributing their software. OSS licenses generally give the user the right to copy, modify and redistribute the software subject to specific license conditions.<sup>8</sup> All copyrights are retained by the licensor – OSS is not public domain software.<sup>9</sup>

Most OSS licenses cleverly use what has become known as the 'copyleft' mechanism, which requires anyone who copies or alters the software to release all changes publicly. Furthermore, this mechanism requires that these changes all be released under the same copyleft license under which the original software was licensed. In this way, as the code and modifications pass from person to person, so they remain open source. 11

### 4 Problems of Enforceability

As we have seen, OSS licences have pioneered a completely new way of looking at software licensing. However, a number of legal challenges to their enforceability have been raised, and the more pressing of these will now be examined with a view to their rebuttal. It must be remembered that OSS licences can include any number of provisions, and only those challenges levelled against common provisions will be considered.

OSS licences, as we have seen, very often include a 'copyleft' clause. These clauses impose on downstream licensees (ie, all licensees down the distribution chain beginning with the author or licensor) the obligation to release any modifications and redistributions of the original work under the same licence under which they received it. Such a clause, as it expands to subsequent modifications and redistribution of the work, is considered self-perpetuating or 'viral'.<sup>12</sup>

Many OSS licences also purport to grant a licence automatically from the

<sup>9</sup> Dennis M Kennedy 'A Primer on Open Source Licensing Legal Issues: Copyright, Copyleft and Copyfuture' (2001) 20 Saint Louis University Public LR 345 at 358.

Christian H Nadan 'Open Source Licensing: Virus or Virtue?' (2002) 10 Texas Intellectual Property LJ 349 at 357.
Jose J Gonzalez de Alaiza Cardona 'Open Source, Free Software, and Contractual Issues' (2007)

<sup>&</sup>lt;sup>7</sup> Open Source Initiative 'Open Source Definition (Annotated)', available at http://www.opensource.org/docs/definition.php ('OSD') (visited on 10 August 2008).

<sup>&</sup>lt;sup>8</sup> Street & Grant op cit note 5 at 14-10.

<sup>&</sup>lt;sup>10</sup> Coined in a communication between Richard Stallman and Don Hopkins (see Johanna Gibson 'Open Access, Open Source and Free Software: Is There a Copyleft?' in: Fiona Macmillan (ed) *New Directions in Copyright Law* (2007) 127 at 139-40).

<sup>&</sup>lt;sup>12</sup> Jose J Gonzalez de Alaiza Cardona 'Open Source, Free Software, and Contractual Issues' (2007) 15 Texas Intellectual Property LJ 157 at 185.

original licensor to downstream recipients of the software.<sup>13</sup> For example, the most recent version of the most widely used OSS licence – the GNU General Public Licence (GPL), states: 'Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License'.<sup>14</sup>

Copyleft clauses are intended to give the licensor standing to sue any downstream licensee of the work, by attempting to create contractual privity between the licensor and all downstream licensees. <sup>15</sup> They also exemplify the Open Source Definition's third principle permitting derivative works and that has the following rationale:

'The mere ability to read source isn't enough to support independent peer review and rapid evolutionary selection. For rapid evolution to happen, people need to be able to experiment with and redistribute modifications.'  $^{16}$ 

This brings us to the first challenge levelled against OSS licences. The copyleft provision (combined with the automatic licence clause) has been said to be problematic in that it purports to pass obligations and rights to third parties through the licence.<sup>17</sup> Robert Merges first argued that these licences are problematic in that they purport to restrict subsequent transferees who receive the software from a licensee of the original licensor. The new transferee is not in contractual privity with the original copyleft licensor, and it is argued that the original licensor cannot therefore enforce this licence against this transferee.<sup>18</sup>

This problem is best illustrated by an example: A, a software creator, licenses it to B under an OSS licence containing a copyleft clause. B then transfers the software to C under the same copyleft licence. May A sue C for breach of contract if C infringes the copyleft licence by, eg, closing off the source of the original software and releasing it under a proprietary End User Licence Agreement (EULA)? Some argue that such an action is prevented by a lack of contractual privity between A and C.<sup>19</sup>

If this is indeed the case, and original licensors who copyleft their software cannot enforce the terms of such licences against third parties, then this would be a major setback to the OSS movement. Original licensors would have to rely on intermediary licensees (B in the above example) to enforce the terms of the licence, something that many intermediaries would be unwilling to do. Third-party transferees (C in the above example) who do not face action by an intermediary would then be free to close off the source of the original OSS,

<sup>13</sup> Hereinafter 'the automatic licence clause'.

<sup>&</sup>lt;sup>14</sup> Section 10 of the GNU Project 'GNU General Public License', available at http://www.gnu.org/licenses/gpl.html (hence 'GPL') (visited on 10 August 2008).

<sup>&</sup>lt;sup>15</sup> Andrew M St Laurent *Understanding Open Source and Free Software Licensing* (2004) at 43.

<sup>&</sup>lt;sup>16</sup> OSD op cit note 7.

<sup>&</sup>lt;sup>17</sup> Cardona op cit note 12 at 202.

<sup>&</sup>lt;sup>18</sup> Robert P Merges 'The End of Friction? Property Rights and Contract in the "Newtonian" World of On-line Commerce' (1997) 12 Berkeley Technology LJ 115 at 129.

<sup>&</sup>lt;sup>19</sup> Andres Guadamuz Gonzalez 'Viral Contracts or Unenforceable Documents? Contractual Validity of Copyleft Licences' (2004) 26 European Intellectual Property Review 331 at 337.

thereby preventing the software development community at large from benefiting from the knowledge that any additional modifications could offer.

Another problem would arise if privity were found to be lacking. Opportunistic licensors could make the software available and then unilaterally revoke any rights that they purportedly granted to third-party transferees. These parties, having no licence to use the software, would then be exposed to copyright infringement claims, being under the impression that they had a licence to act as they did.<sup>20</sup>

This problem could no doubt be solved if distribution of the software were centralised and each licensee were required to obtain her copy of the software from a website under, eg, a click-wrap agreement. Here each licensee would be in privity with the original licensor. However, this centralised distribution of code would be at odds with the freedom to share code that the OSS movement seeks to engender, and the gain in enforceability might not be worth the sacrifice of principle.<sup>21</sup>

The doctrine of privity of contract is trite law in South Africa: parties not privy to a contract cannot sue or be sued on it.<sup>22</sup> So if a third-party transferee is not privy to an OSS licence agreement with the original licensor, the terms of that agreement cannot be actionable under contract law against him. Could third-party transferees then be in contractual privity with the original licensor of the software? This must be answered by applying general principles of contract, specifically the principles of offer and acceptance.

One possibility of privity arising between original licensor and third-party transferee is for the automatic licence clause (or a similar clause) to be construed as an offer to the public to use, modify and redistribute the software subject to copyleft conditions, an offer that can be accepted through using, modifying or redistributing the software. In the English case of *Carlill v Carbolic Smoke Ball Co*<sup>23</sup> it was decided that offers can be made to the public at large, which can ripen into contracts with anybody who accepts them. This principle has been accepted into South African law.<sup>24</sup> However, whether a particular publication is an offer must be treated as a question of fact, and the nature of the publication, the terms in which it is phrased and the surrounding circumstances must be considered.<sup>25</sup>

Therefore, if the automatic licence clause (or a similar clause) is to be considered an offer to the public, it is suggested that express language be used indicating unequivocally that the licensor intends the clause to be an offer to use, modify and redistribute the software subject to copyleft conditions. In this regard s 10 of the GPL combined with s 9, which reads 'by modifying or propagating a covered work, you indicate your acceptance of this License to

 $<sup>^{20}</sup>$  David McGowan 'Legal Implications of Open-source Software' 2001  $\it University$  of Illinois LR 241 at 289.

<sup>&</sup>lt;sup>21</sup> Idem at 298.

<sup>&</sup>lt;sup>22</sup> RH Christie *The Law of Contract in South Africa* 5 ed (2006) at 260.

<sup>&</sup>lt;sup>23</sup> [1893] 1 QB 256 (CA).

<sup>&</sup>lt;sup>24</sup> Bloom v The American Swiss Watch Co 1915 AD 100 at 105.

<sup>&</sup>lt;sup>25</sup> Christie op cit note 22 at 39.

do so',<sup>26</sup> appears to evidence an offer from the original licensor to the recipient of the copylefted work (whoever that might be) to modify or propagate the work, subject to conditions.

Yet further issues surround the recipient's acceptance of such an offer. In the first place, would the mere use, modification or redistribution of copylefted software constitute acceptance? Acceptance of an offer by conduct is recognised in South African law, but what is required is some unequivocal act from which the inference of acceptance can be drawn.<sup>27</sup> So the use, modification or redistribution of copylefted software may constitute acceptance of the licensor's offer, depending on whether such use can be unequivocally construed as manifesting acceptance. This seems all the more likely in the case of the GPL, s 9 of which specifically states that modification or propagation of the software indicates acceptance.<sup>28</sup>

Second, it is trite that for an offer to be validly accepted, the offeree must have knowledge of the offer.<sup>29</sup> Most copyleft licences require each licensee who redistributes the OSS to ensure that the software is distributed together with a notice stating that the software is licensed under the original OSS licence. Sections 4 and 5 of the GPL are clear in this regard.<sup>30</sup> Therefore, in cases in which this obligation was fulfilled and a third-party transferee received the software under this notice, he should be bound to the terms of the licence if the requirements of the so-called ticket cases were met (whereby a party is bound by terms even though he has not read them).<sup>31</sup>

However, if the third-party transferee does not receive this notice and is unaware that the use, modification or redistribution of the software is subject to a copyleft licence, then in effect he does not know of the original licensor's offer, and cannot be held to have accepted the licence terms. The principles from the ticket cases cannot apply here because they require, at the very least, that the terms of the offer were made available to the offeree.<sup>32</sup> The copyleft licence would then be contractually unenforceable against the third-party transferee. However, it is unlikely that a programmer would be unaware that popular OSS is not subject to an OSS licence. Furthermore, the licensor can still resort to a copyright infringement claim (see below).

Third, it is settled law that a contract is not concluded until acceptance of an offer has been communicated to the offeror. The offeror can, however, expressly or impliedly waive the requirement that acceptance be communicated to him.<sup>33</sup> Privity can therefore be created between the original licensor and third-party transferees under OSS licences even if the original

<sup>&</sup>lt;sup>26</sup> GPL op cit note 14.

<sup>&</sup>lt;sup>27</sup> Reid Bros (South Africa) Ltd v Fischer Bearings Co Ltd 1943 AD 232 at 241.

<sup>&</sup>lt;sup>28</sup> GPL op cit note 14.

<sup>&</sup>lt;sup>29</sup> Bloom v The American Swiss Watch Co supra note 24.

<sup>&</sup>lt;sup>30</sup> GPL op cit note 14.

<sup>&</sup>lt;sup>31</sup> See Tana Pistorius 'Shrink-wrap and Click-wrap Agreements: Can They Be Enforced?' (1999) 7 *Juta's Business Law* 79 at 81.

<sup>32</sup> Christie op cit note 22 at 180.

 $<sup>^{33}</sup>$  Idem at 68.

licensor has not been made aware that a third party has accepted his licence, provided that the licensor expressly or impliedly waived the requirement of communication. It is submitted that ss 9 and 10 of the GPL<sup>34</sup> read together indicate an intention to waive the above requirement in that they expressly state that third parties automatically receive a licence upon conveyance of the software, and expressly provide that modification or propagation indicates acceptance of the licence.

Besides construing copyleft licences as offers to the public, it has been suggested that contractual privity can arise between licensor and third-party transferee on the basis of a contract for the benefit of a third party (stipulatio alteri).<sup>35</sup> It is generally accepted in South African law that contracts for the benefit of third parties are actually contracts between two persons designed to enable third parties to become a party to a contract with one of those two persons.<sup>36</sup> The initial contract between the original promisor and promisee creates an offer to the third party that, if accepted, places that party in privity with the original promisor.<sup>37</sup> This latter contract may, of course, carry with it obligations as well as benefits.<sup>38</sup> So it may be possible for a copyleft licence to be construed as a contract for the benefit of a third party, specifically a contract between a licensor and his direct licensee that creates an offer to a third-party transferee to use, modify or redistribute the software, subject to the copyleft conditions. This offer could be accepted by conduct, as described above.

One challenge that could be levelled against this construction is that the general requirement of contract formation that performances be ascertainable requires that the beneficiary of a stipulatio alteri be described in such a manner that he can be identified.<sup>39</sup> It could be argued that because of the viral manner in which OSS is distributed, third-party transferees cannot be sufficiently identified. However, there is case authority for the proposition that beneficiaries can be indicated as a class of persons.<sup>40</sup> In *Croce v Croce*<sup>41</sup> the Court considered a motorcar insurance policy that extended indemnification for third-party injury claims to any driver of the vehicle that drove it with the permission of the owner, subject to the condition that the driver had a driver's licence. The Court considered such a class of persons to be sufficiently identifiable.<sup>42</sup> This aspect of the decision has been commended by Professor Ellison Kahn, who observes that in *Hyams v Wolf & Simpson*,<sup>43</sup> Innes CJ and

<sup>34</sup> GPL op cit note 14.

<sup>&</sup>lt;sup>35</sup> Lucie Guibault & Ot van Daalen Unravelling the Myth around Open Source Licences: an Analysis from a Dutch and European Law Perspective (2006) at 75.

<sup>&</sup>lt;sup>36</sup> Christie op cit note 22 at 266.

<sup>&</sup>lt;sup>37</sup> Idem at 268.

<sup>38</sup> Idem at 266.

<sup>&</sup>lt;sup>39</sup> Schalk van der Merwe, LF van Huyssteen, MFB Reinecke & GF Lubbe *Contract: General Principles* 3 ed (2007) at 245.

<sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> 1940 TPD 251.

<sup>&</sup>lt;sup>42</sup> Idem at 264-5.

<sup>&</sup>lt;sup>43</sup> 1908 TS 78.

Solomon J did not rule out the possibility of a stipulatio alteri being concluded for the benefit of any member of the public at large.<sup>44</sup>

Therefore, it is submitted that it is possible for a copyleft licence to be construed as a stipulatio alteri. However, it is advisable that any such licence clearly states that it is to be interpreted in this way, and that it must seek to identify as specifically as possible the class of persons to whom the offer is made. This could be done by limiting the offer to all those who modify or propagate the software. There appears to be nothing that makes such persons less identifiable than the driver in *Croce v Croce*<sup>45</sup> mentioned above. Accordingly, s 10 of the GPL<sup>46</sup> could be construed as creating an offer to third-party transferees within the agreement between the original licensor and his direct licensee. This offer is limited to recipients of the software, and it is specifically provided in s 9 of the GPL that modification or propagation of the software indicates acceptance.

Another solution that has been advocated to solve the privity problem is to grant direct licensees the power to sub-license the software.<sup>47</sup> But this solution does not seem possible under South African law. Section 22(8) of the Copyright Act 98 of 1978 ('the Act') permits sub-licensing, and deems sub-licensees' relevant actions to have been done with the licence of the original grantor. But the granting of a sub-licence does not create contractual privity between the original grantor and a sub-licensee,<sup>48</sup> and the original grantor cannot therefore institute action for breach of contract against a sub-licensee.

We must now discuss what will happen if a copyleft licence is found not to create contractual privity between an original licensor and a third-party transferee. Where there is no such privity, the copyright holder of the software is still protected by copyright law.<sup>49</sup> It is therefore said that copyright acts as a backup to OSS licences.<sup>50</sup> The copyright holder can therefore bring an infringement action against a third-party transferee who performs one of the licensor's exclusive acts. Of course, this is so only if we consider no valid licence to perform the exclusive act to have been granted to the third-party transferee because of a lack of contractual privity. If this is indeed the case, and we consider licences to be conferrable only through contract, then we will still be faced with the problem of the opportunistic licensor identified above. But we must ask whether licences are conferrable only through contract in South African law.

In answering this question, we must turn to the sections of the Act that

 $<sup>^{\</sup>rm 44}$  Ellison Kahn 'Extension Clauses in Insurance Contracts' (1952) 69 SALJ 53 at 55.

<sup>&</sup>lt;sup>45</sup> Croce v Croce supra note 41.

<sup>46</sup> GPL op cit note 14.

<sup>&</sup>lt;sup>47</sup> Guibault & Van Daalen op cit note 35 at 77.

<sup>&</sup>lt;sup>48</sup> Owen Dean Handbook of South African Copyright Law (1987) (revision service 12, 2004) at 1-86.

<sup>&</sup>lt;sup>49</sup> Cardona op cit note 12 at 201.

<sup>&</sup>lt;sup>50</sup> Maureen O'Sullivan 'Making Copyright Ambidextrous: An Expose of Copyleft' 2002 (3) *The Journal of Information, Law and Technology*, available at http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2002\_3/osullivan (visited on 24 August 2008).

provide for copyright licences. Section 22(4), providing for non-exclusive licences, states that 'such a licence granted by contract shall not be revoked ... except as the contract may provide, or by a further contract'. This seems to imply that licences can be granted in a non-contractual way – if they could be granted only by contract, then why the need for the words 'granted by contract'? This view also appears correct if we apply the presumption of statutory interpretation that language is not to be used unnecessarily. According to this presumption, we must interpret this provision in a way that avoids tautology.<sup>51</sup> If a licence can be granted only by contract, then the words 'such a licence granted by contract' appear tautologous. To avoid tautology, we must construe these words as meaning that a licence can be granted otherwise than by contract. This suggestion is supported by a close reading of the foremost authority on copyright law in South Africa – Dean's Copyright Handbook – which, in relation to non-exclusive licences, states that such a licence 'can be revoked at any time but if granted by a contract cannot be revoked ... except in accordance with the contract...'.52 The word 'if' here clearly implies that a licence can be granted in some non-contractual wav.

However, *The Law of South Africa* states the following on s 22(4): 'Besides being somewhat contradictory, the provision appears unnecessary, as, apart from licences issued in pursuance of an order of the Copyright Tribunal, the granting of any licence, whether nonexclusive or exclusive, is inevitably the consequence of a contract...'.<sup>53</sup> The use of the word 'inevitably' here suggests that contracts are certainly an avenue for the granting of licences. However, this in no way suggests that it is legally impossible for a licence to be granted in some other way.

In Video Parktown North (Pty) Ltd v Paramount Pictures Corporation; Shelbourne Associates & Others; Century Associates & Others,<sup>54</sup> the Court implied that licences are contracts: 'In this sense, as Mr Harms pointed out, the agreement between the licensor and the licensee is no more than a pactum de non petendo.'55 However, there is nothing in this case that specifically states that licences must be granted through agreement. This passage seems merely to describe which form of agreement a licence will take when granted by agreement.

So there appears to be a strong case to be made for licences being granted in some non-contractual way, and if this is the case, then licensors making software available under an OSS licence may be held to have granted a licence to third-party transferees even where no contractual privity exists between them. In that event, the problem of the opportunistic licensor falls

<sup>&</sup>lt;sup>51</sup> Lourens Marthinus Lourens du Plessis Re-interpretation of Statutes (2002) at 212.

<sup>52</sup> Dean op cit note 48 at 1-85.

<sup>&</sup>lt;sup>53</sup> AJ Smith 'Copyright' in: WA Joubert (founding editor) *The Law of South Africa* volume 5, part 2 2 ed (2003) in par 68.

<sup>&</sup>lt;sup>54</sup> 1986 (2) SA 623 (T).

<sup>55</sup> Idem at 632.

away. But one must ask on which basis the user would enforce the licence against the opportunistic licensor. It obviously cannot be a contractual basis. It is submitted that the basis for this enforcement would be statute law: s 22(4) of the Act, which provides for the granting of non-exclusive licences. If the interpretation of this section advocated above is accepted – ie, if it is accepted that licences can be granted in some non-contractual way – then it must also be accepted that licences are distinct from contracts. They can be seen as mere permissions, <sup>56</sup> or dispensations, <sup>57</sup> and the authority for the granting of rights through them is s 22(4) of the Act. So here the user would claim that a written licence has been granted to her in terms of s 22(4) of the Act, and that this licence permitted her to do the acts that are claimed to be infringing the opportunistic licensor's copyright. This argument in favour of licences being distinct from contracts is evident in the debate about whether the GPL is a licence or a contract in American jurisprudence. <sup>58</sup>

A user of OSS who finds herself under threat from an opportunistic licensor could also turn to the defence of estoppel by representation. She would argue that the licensor is precluded from denying the truth of the representation that the user is licensed, because the user relied on such representation and permitting the licensor to deny its veracity would be to her detriment.<sup>59</sup>

The final defence that a user under threat from an opportunistic licensor could bring is the defence of a licence having been granted to her through the conduct of the licensor. Section 22(4) of the Act specifically states that a licence can be inferred from conduct. It is submitted that where a distributor makes OSS freely available to the public, an implicit licence to use the software can be inferred. However, it may be difficult to convince a court to infer a licence to redistribute or modify the software from a mere posting of the software online.<sup>60</sup>

If licences can indeed be granted without recourse to contract, then this could also make the requirement of contractual privity unnecessary for the enforcement of such licences against third-party transferees. In the recent American case of *Jacobsen v Katzer*,<sup>61</sup> the Court considered the enforceability of the open source Artistic Licence. The appellant was the copyright holder of software that allows a user to programme the decoder chips that control model trains. He made this software freely downloadable under the Artistic Licence on a website. It was alleged that during the development of a competing software product, the appellees downloaded part of the appellant's software and incorporated it into their competing software. The appellees' software did not comply with the terms of the Artistic Licence in that their software did not

<sup>&</sup>lt;sup>56</sup> Smith op cit note 53 in par 68.

<sup>&</sup>lt;sup>57</sup> Kinemas Ltd v African Theatres Ltd 1928 WLD 100 at 103.

<sup>&</sup>lt;sup>58</sup> See Cardona op cit note 12 at 186.

<sup>&</sup>lt;sup>59</sup> See H Daniels 'Estoppel' in: WA Joubert (founding editor) *The Law of South Africa* volume 9 2 ed (2005) in pars 656-71.

<sup>60</sup> Cardona op cit note 12 at 201.

<sup>&</sup>lt;sup>61</sup> No. 2008-1001 (Fed. Cir. Aug 13, 2008), available at http://www.cafc.uscourts.gov/opinions/08-1001.pdf (visited on 20 August 2008).

include the authors' names, Artistic Licence copyright notices, references to the file containing the terms of the licence, an identification of the original source of the allegedly copied files, and a description of how the files or computer code had been changed from the original source code.<sup>62</sup>

The appellant moved for an injunction, arguing that a violation of the licence terms constituted copyright infringement, which under the applicable law led to a presumption of irreparable harm that was a basis for the granting of an injunction. The Court a quo, however, ruled that a breach of the licence terms was only a cause of action for breach of contract, and not copyright infringement.<sup>63</sup> On appeal, the United States Court of Appeals for the Federal Circuit held that the restrictions that the licence purported to place on the user could be construed as conditions limiting the scope of the licence, as opposed to mere covenants or terms of an agreement to the licence.<sup>64</sup> If these conditions are not complied with then the user is acting beyond the scope of the licence, the user becomes an infringer under copyright law, and the author can claim for infringement of copyright.<sup>65</sup> The Court of Appeals therefore remitted the case to the Court a quo for it to determine whether copyright infringement had indeed occurred.<sup>66</sup> In this case, the Court appears to accept that licences are distinct from contracts and can be granted in a non-contractual way. In deciding that the terms of the particular licence are conditions limiting the scope of the licence, as opposed to covenants to it, the Court implies that licences can be non-contractual.

In the only case worldwide where a court has given judgment on the enforceability of the GPL, the District Court of Munich in *Welte v Sitecom Deutschland*<sup>67</sup> treated the GPL as a contract. Here the plaintiff was primarily responsible for the development of firewall software intended to replace the outdated firewall software of the GNU/Linux operating system. The plaintiff made this software available for download, and licensed it under the GPL. The defendant was the German subsidiary of a company located in the Netherlands. The company's web site offered a certain network router for sale and made the software required to operate the router available for download. This software included the plaintiff's software in object code form. The defendant's web site contained neither a reference to the fact that the firmware contained software that was subject to the GPL nor a reference to the text of the GPL or the source code of the plaintiff's software – all of which was

<sup>62</sup> Idem at 2-3.

<sup>63</sup> Idem at 4.

<sup>64</sup> Idem at 13.

<sup>65</sup> Idem at 9-10.

<sup>66</sup> Idem at 15.

<sup>&</sup>lt;sup>67</sup> No. 21 O 6123/04 (District Court of Munich I, May 19, 2004), available at <a href="http://www.jbb.de/urteil\_lg\_muenchen\_gpl.pdf">http://www.jbb.de/urteil\_lg\_muenchen\_gpl.pdf</a> (official German publication). See Thomas Hören & Christian Ahlert 'District Court of Munich I, Judgement of 19/05/2004-file reference: 21 O 6123/04 (Open Source-effectiveness of GPL)' available at <a href="http://www.oii.ox.ac.uk/resources/feedback/OIIFB\_GPL2\_20040903.pdf">http://www.oii.ox.ac.uk/resources/feedback/OIIFB\_GPL2\_20040903.pdf</a> (English translation provided by the Oxford Internet Institute), (hence 'Welte translation') (visited on 20 August 2008).

required by the terms of the version of the GPL that the plaintiff used to licence his software.<sup>68</sup>

The plaintiff sued for an injunction, arguing that the defendant had failed to respect the terms of his licence and was therefore infringing the plaintiff's copyright. The plaintiff relied in this regard on the clause in the GPL that automatically terminates the licence in the event of a failure to comply with its terms. He argued that the licence was automatically terminated when the defendant failed to comply with the GPL's terms, and therefore the subsequent offering of the plaintiff's software for download was done without licence and was an infringement of the plaintiff's copyright.<sup>69</sup> A temporary injunction was granted that was confirmed on appeal.<sup>70</sup> The appeal court treated the GPL as a contract between the plaintiff and the defendant,71 and upheld the copyleft clause as well as the automatic termination clause of the GPL.<sup>72</sup> With respect, though, the Court failed to explain how it considered a contract to have been formed between the plaintiff and the defendant on the terms of the GPL, and so this case does not shed much light on how OSS licences can create contractual privity between the licensor and third-party transferees. Yet this case is a success for the OSS movement in that it confirms that the terms of the GPL can be valid contractual provisions. It is also important because the Court agreed that a copyright holder could adopt the GPL as his sole licensing mechanism and refuse to allow copying, modification, or redistribution under any other terms. The Court also confirmed the distinction between licensing software under the GPL and placing software in the public domain.<sup>73</sup>

If the reasoning in *Jacobsen v Katzer*<sup>74</sup> is imported into our law, as it is submitted it should be, and a court interprets s 22(4) of the Act in the way advocated above, then this can be used to overcome the enforcement issue flowing from the privity problem. If a court understands licences to be conferrable without contract, it must also respect a copyright holder's right to limit the scope of those licences. If privity is no longer an issue (because the licence is conferrable without contract), then it is submitted that a court should uphold limitations on the scope of a licence that purport to require the third party to perform some act before being entitled to perform one of the copyright holder's exclusive acts – as the Court did in *Jacobsen*.<sup>75</sup> British copyright law refers to a 'condition precedent to the exercise of the licence'<sup>76</sup> and maintains that a failure to comply with the condition will mean that what is done is an infringement of copyright. British copyright law also accepts that

<sup>&</sup>lt;sup>68</sup> Welte translation op cit note 67 at 2.

<sup>&</sup>lt;sup>69</sup> Idem at 3.

<sup>70</sup> Idem at 2.

<sup>71</sup> Idem at 5.

<sup>72</sup> Idem at 8.

<sup>&</sup>lt;sup>73</sup> Brian W Carver 'Share and Share Alike: Understanding and Enforcing Open Source and Free Software Licenses' (2005) 20 *Berkeley Technology LJ* 443 at 469.

<sup>&</sup>lt;sup>74</sup> Jacobsen v Katzer supra note 61.

<sup>75</sup> Ibid.

<sup>&</sup>lt;sup>76</sup> KM Garnett, Gillian Davies & Gwilym Harbottle Copinger and Skone James on Copyright 15 ed (2005) at 315.

such conditions can involve positive obligations for the licensee; eg, there may be a condition precedent to the right to use a song in a film that the composer be credited.<sup>77</sup>

So if a third-party transferee fails to respect one of the conditions of the OSS licence, then he can be said to be acting beyond the scope of the licence and without authority, and will be liable for copyright infringement. The copyright holder can then claim the normal remedies for copyright infringement: an interdict restraining the performance of the infringing act, damages or a reasonable royalty, and delivery up of infringing copies of the work in question or plates.<sup>78</sup>

It must be asked whether the copyright holder in the above situation could compel the third-party transferee to reveal the source code of any modifications made to the software, so that the goal of benefiting the software community at large can be realised. It is submitted that this could be achieved by means of the remedy of delivery up of infringing copies or plates. An infringing copy in relation to a computer programme is defined in the Act as 'a copy of such computer programme, being in any such case an article the making of which constituted an infringement of the copyright in the work...'.79 Therefore, any software produced by the third-party transferee using a sufficient amount of the original code to qualify as an infringement of the copyright in the work could be subject to a delivery-up order. However, does the infringing software subject to the delivery-up order include the source code of the work as opposed to the object code or executable files of the software? It is obviously desirable from the perspective of the copyright holder and the open source community that it is the source code that must be delivered, because as we saw above, object code is often very difficult to reverse engineer back to the source code. It is submitted that the remedy of delivery of plates provided for in s 24(1) of the Act can be used to this end. A 'plate' is defined in the Act as including 'any version of a work of whatsoever nature used to make copies'.80 It is submitted that the source code of the infringing work can be used to make copies of the work, and therefore may be subject to a delivery-up order.

Damages as a remedy to the infringement of the copyright in OSS may be problematic. Infringement damages are delictual and conventionally take the form of loss of profits through diminished exploitation of the work by the copyright holder.<sup>81</sup> As the first requirement of the Open Source Definition requires that OSS licences permit free redistribution, the holders of the copyright in software so licensed cannot be said to have any expectations of profiting from exploiting the work in a way that only the copyright holder is

<sup>77</sup> Ibid.

<sup>&</sup>lt;sup>78</sup> Section 24(1) of the Act.

<sup>79</sup> Section 1 of the Act.

<sup>80</sup> Ibid.

<sup>&</sup>lt;sup>81</sup> Dean op cit note 48 at 1-74.

permitted to do, ie, from licensing the work.<sup>82</sup> Furthermore, where a licensee has closed off the source of any modifications to the work of such a copyright holder, the loss incurred by the copyright holder will normally be in the form of the inability to benefit from such modifications. The difficulties in framing such loss as delictual will be clear (what value should a court attach to such a benefit?). A discussion of how damages can be used is, however, beyond the scope of this article, but should be considered by OSS licensors because of the deterrent nature of such claims.

Finally, it must be noted that there is one disadvantage to relying on an infringement of copyright claim to enforce an OSS licence. It is possible that copyright in the software will not be recognised globally, and that the purported copyright holder will not be able to pursue an infringement action in a country where copyright in his work is not recognised. 83 Enforcement of the licence as a contract is no doubt preferable in this regard, since agreements are respected globally.

#### 5 Conclusion

This article has undertaken an analysis of open source software through the prism of South African law. We began by considering what exactly OSS entails. It was found that in essence, OSS involves software that is made freely available by its author for anyone to modify or redistribute, provided that the source code of the software is made freely available to others. We then turned to OSS licences, and examined how these licences manage to use copyright law to bypass many of its own restrictions. Finally, various problems of enforceability levelled against such licences were considered, with a focus on problems arising from the doctrine of contractual privity. It was found that even though there is no direct contract between an OSS licensor and a third-party transferee, there are various avenues in South African law than could be used to argue a claim that contractual privity does in fact arise. However, it was found that even if contractual privity has not arisen, the Copyright Act can be interpreted in such a way that allows copyright licences to be granted non-contractually, so contractual privity becomes a non-issue, and the licence can be enforced through copyright law, using the usual remedies for copyright infringement.

<sup>82</sup> Merges op cit note 18 at 129.

<sup>83</sup> O'Sullivan op cit note 50.