# UNIVERSITY Inventions: When Is A Student A Consumer?

OXFORD UNIVERSITY Innovation limited V Nanoimaging limited

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## Introduction

Is a PhD student a consumer or an employee? How fair are intellectual property provisions in PhD contracts? Do universities retain too much equity in spin outs? These are some of the questions thrown up by the UK Patents Court's recent decision in *Oxford University Innovation Limited v Oxford Nanoimaging Limited* ('the judgment').<sup>1</sup> In his introductory comments to the 651-paragraph judgment, Mr Daniel Alexander KC ('the judge') acknowledged the atypical nature of the case: '*Cases of this kind involving these kinds of issues in universities rarely come before the courts. None has in this country before this one*'.<sup>2</sup>

However, that is not to say the issue is not a common one. The issues that arose in this case are especially common to collaborative research in the life sciences sector. Accordingly, the issues addressed in the judgment have particular relevance for universities and other academic institutions which employ interns or have students undertaking research which may be of commercial value.<sup>3</sup> This is especially true where there has recently been an increased focus by universities on the commercialisation of research work conducted within their institutions.<sup>4</sup> Some of the issues of interest include: the level of consumer protection afforded to differing levels of student; the correct approach in determining whether someone was employed to innovate; the extent to which universities potentially overestimate their influence on inventions made within their institution; and conversely the extent to which student inventors underestimate the support and benefit of the conditions provided for them by universities.

The approach to retaining both Intellectual Property ('IP') rights and equity in spin out companies adopted by the University of Oxford came under heavy scrutiny in this case and ultimately what should be deemed the 'correct' approach (regardless of the judge's decision in this instance) may well continue to divide opinion, depending upon which end of the looking glass you find yourself.

### Background

The claimant, Oxford University Innovation ('OUI'), is the technology transfer arm of the University of Oxford ('the University'). The defendant, Oxford Nanoimaging Limited ('ONI'), is a spin out from the University which commercialised a specialised microscope developed at the University, the 'Nanoimager'. The Nanoimager was developed in the condensed matter physics laboratory of Professor Achilles Kapanidis.5 However, it was common ground that Mr Bo Jing ('Mr Jing') conducted the bulk of the detailed development of the Nanoimager. Mr Jing first worked on the project as a research intern and later as a DPhil researcher. Mr Jing subsequently became Chief Technology Officer and is now CEO of ONI, having left the University to focus on the commercialisation of the Nanoimager. OUI had licensed the relevant intellectual property rights in the Nanoimager to ONI ('the licence') and it is against that background that the initial claim was made by OUI against ONI for unpaid royalties under the licence.

4) Ibid. at [7].
 5) Ibid. at [12].

<sup>1) [2022]</sup> EWHC 3200 (Pat).

<sup>2)</sup> See the judgment at [9].

<sup>3)</sup> Ibid. at [5].

# The Issues

ONI's primary case was that it was Mr Jing as opposed to OUI who was entitled to the IP rights subject of the licence. They contended that because both ONI and OUI had entered into the licence under the common misconception over who owned the relevant IP rights, the legal doctrine of 'common mistake' applied such that the licence should be rendered void.<sup>6</sup> In other words the mistake was fundamental to the nature of the licence and directly affected the definition of what the parties were contracting for and thus robbed the licence of all substance. ONI's secondary case was that if OUI owned the rights then Mr Jing should be classed as a consumer and the terms of his DPhil contract were unfair under consumer rights legislation and thus void, meaning no royalties would be owed. The issues at trial were narrowed to two broad areas:

(1) The impact of section 39 of the Patents Act 1977; and

(2) The effect of consumer protection legislation on the University's IP regime.

# The Impact of Section 39 of the Patents Act 1977

This issue turned on whether the invention could be reasonably expected from Mr Jing in the course of his duties during the period in question.<sup>7</sup> OUI relied on section 39(1)(a) of the Patents Act 1977 'Right to employees' inventions'. The judge adopted the interpretation of section 39 as set out by the Court of Appeal in *LIFFE v Pinkana*.<sup>8,9</sup> The judge ultimately found that Mr Jing's duties as an intern expressly included development of the Nanoimager.<sup>10</sup> He further found that that Mr Jing had been employed at least partly because of attributes which made him likely to make inventions.<sup>11</sup> This

led to a clear reasonable expectation that invention may result from Mr Jing fulfilling his duties.

ONI made a series of rejected arguments concerning: Mr Jing's low status in the University; his youth and lack of qualifications and experience; that inventions are not typically expected of PhD students; the very modest salary paid to Mr Jing; the lack of direction and modest level of support given to Mr Jing; and the fact Mr Jing was on a '*casual contract*'.<sup>12</sup>

In rejecting those arguments and finding that the University was properly entitled to the rights to the inventions created in the course of Mr Jing's internship pursuant to section 39, the judge neatly summarised the illogical position of ONI as follows:

> 218 ... If ONI's case were accepted, it would follow that Mr Jing was hired into Professor Kapanidis' lab with the express task of improving the Small Setup because of his skills and experience, was paid to carry out that task (inter alia with potential rights to benefit from doing so), demonstrated that he was adept at it and was, therefore, asked to continue his work under the supervision of Professor Kapanidis and Dr Crawford but nevertheless, was entitled to keep the fruits of his efforts from Professor Kapanidis and the University and to exploit them entirely for his own benefit. In my view, Oxford is right to submit that this would be a surprising outcome. It is not what section 39 of the Act provides.

# The Effect of Consumer Protection Legislation on the University's IP Regime

This aspect of the case concerned the terms under which Mr Jing became a DPhil student, as it was these which

6) Ibid. at [14] to [15].

- 7) Ibid. at [20].
- 8) [2007] EWCA Civ 217.
- 9) See the judgment at [202] to [204].

- 10) Ibid. at [207].
- 11) Ibid. at [208].
- 12) Ibid. at [211] to [213].

operated to transfer title to the University in the inventions made by him during those studies.<sup>13</sup> ONI's contention was that the IP provisions under which Mr Jing became a DPhil student ('the IP provisions') contravened the Unfair Terms in Consumer Contracts Regulations 1999/2083 ('UTCCRs') and so were not binding, and thus he retained the rights to any inventions made while he was a DPhil student. Determination of this issue boiled down to two questions, both of which ONI needed to win on to succeed:

(1) Was Mr Jing a 'consumer' pursuant to the UTCCRs? and

(2) Were the IP provisions '*unfair*' within the meaning of the UTCCRs?

Both parties sought final determination on the arguments concerning whether Mr Jing's DPhil contract attracted consumer protection and the fairness of the IP provisions. The judge mused that Mr Jing likely sought these determinations as his case had a campaigning aspect to it such that he wanted the fairness of the IP provisions to be evaluated generally.<sup>14</sup> Alternatively, given the severe critique of the IP provisions, the judge felt that it may be that the University wished to have independent determination that they fell on the right side of the line.<sup>15</sup>

Given the novel nature of the issues, the judge considered all the related authorities regarding both questions in some detail, stating '*There are no juridical short cuts available*'. With regards to both questions, this article will not attempt to discuss these authorities in detail, but rather highlight the key authorities considered and summarise some key aspects of the judge's findings.

### 'Consumer'?

#### Legislation

The judge began answering question (1) by establishing the applicability of the UTCCRs and its basis in the Unfair Terms in Consumer Contracts<sup>16</sup> (popularly known as the Unfair Consumer Terms Directive, or, here, 'the UCTD'). Before engaging with the CJEU case law applicable to the legislation the judge further noted: (1) since the language of the UCTD was reproduced in the UTCCRs it is convenient to focus on the UCTD;<sup>17</sup> and (2) that the case law on the interpretation of the UCTD continues to be relevant and binding given that the departure of the UK from the EU did not affect 'EU-derived domestic legislation'.<sup>18</sup>

#### CJEU and English case law

The judge then embarked on a detailed discussion of the case law discussing each of the following cases:<sup>19</sup> Benincasa,<sup>20</sup> Gruber,<sup>21</sup> Schrems,<sup>22</sup> Milivojevic,<sup>23</sup> Standard Bank,<sup>24</sup> AMT Futures,<sup>25</sup> Ramona Ang,<sup>26</sup> De Grote,<sup>27</sup> Costea,<sup>28</sup> Pouvin,<sup>29</sup> and Heriot-Watt.<sup>30</sup> The judge indicated that those cases taken together provided an outline of the of the position the law and the CJEU and English court's approach to the term 'consumer' in respect of the UCTD.

#### 13) Ibid. at [24].

- 14) Ibid. at [221].
- 15) Ibid.
- 16) 93/13/EEC.
- 17) The judgment at [229].
- 18) Ibid. at [239].

19) The first cases relate to the Brussels Convention/Regulation's approach to 'consumers' and how it differs from that of UCTD.<sup>19</sup> This is because OUI contended that earlier case law relating to the Brussels Convention/Regulation should be read over to the UCTD, so the judge felt it necessary to engage with it in some detail.<sup>19</sup>

20) Case C-269/95 *Benincasa v Dentalkit* [1997] I. L. Pr. 559, see the judgment, [247] to [259].

21) Case C-464/01 *Gruber v Bay Wa AG* [2006] QB 204, see the judgment, [260] to [268].

22) Case C-498/16 *Schrems v Facebook Ireland* [2018] 1 WLR 4343, see the judgment, [269] to [270].

- 23) See the judgment, [271] to [273].
- 24) Standard Bank London Ltd v Apostolakis [2002] CLC 933.
- 25) AMT Futures Limited v Marzillier [2015] 2 WLR 187.
- 26) Ramona Ang v Reliantco Investments Ltd [2019] EWHC 879 (Comm).
- 27) Case C-147/16 Karel de Grote, see the judgment, [289] to [302].
- 28) Case C-110/14 Costea, see the judgment, [303] to [313].

29) Pouvin and Dijoux [2019] EUECJ C-590/17, see the judgment, [303] to [313].

30) Heriot-Watt University v Schlamp [2021] SCLR 249, see the judgment, [314] to [318].

Applying that line of authority to the present situation, the judge indicated that it could not be in dispute that all circumstances can be taken into account when answering the *'consumer'* question.<sup>31</sup> He further stated that he was required to be guided by the *'spirit'* of the interpretation of *'consumer'* adopted by the CJEU,<sup>32</sup> noting it is not always easy to discern the *'spirit'* of the approach of any court.

The judge decided the best course was to first assess how the authorities would apply to other contracts made by higher education institutions and those undertaking academic work within them and compare and contrast those positions to that of a DPhil. The judge elected to specifically compare (i) post-doctoral researchers and (ii) undergraduates.

Post-doctoral researchers. The judge was relatively swift with his assessment of these contracts: 'The reason that such a contract is not within the UCTD is inter alia because it is a contract of employment'.33

*Undergraduates*. The judge provided a more detailed analysis of the position of undergraduates, ultimately concluding that they should fall into the category of *'consumers'*, regardless of whether their course is undertaken with a professional aim in mind or is a vocational course.<sup>34</sup> Three of the key characteristics of the nature of the relationship in an undergraduate course supporting this conclusion (and thus the protection that goes with it) were:

(1) Often these are essential '*purchase*' for an individual wishing to pursue an increasing number of jobs/professions.35

Those embarking on such courses are typically 17 to
 20 years old and commercially inexperienced.<sup>36</sup>

(3) Financially it is often the largest purchase one makes (other than buying a house).<sup>37</sup>

Against that background the judge found that DPhil students shared more characteristics with undergraduates than post-doctoral researchers<sup>38</sup> and thus are normally entitled to be considered consumers and benefit from the protection they are provided with.<sup>39</sup>

In those circumstances, and because the judge felt the University had not shown Mr Jing's circumstances to be such that it would be wrong to treat him as a consumer, the judge found that as a DPhil student he should be held to be a consumer within the meaning of UCTD.<sup>40</sup>

# 'Unfair'?

Having established Mr Jing was a consumer the judge turned his attention to determining whether the relevant provisions of his DPhil contract could be deemed '*unfair*'. To do so he considered three matters:

(1) The general approach required by UCTD to determine whether a term in consumer contract is unfair.

(2) How this approach applies to IP rights in contracts between universities and DPhil students.

(3) Whether the IP provisions were unfair to Mr Jing.

### General Approach under UCTD

The judge began by setting out a series of general principles,<sup>41</sup> including: the relevant statutory provisions;<sup>42</sup> the requirement to consider all the terms of the contract;<sup>43</sup> the need for the term to create a '*significant*' imbalance;<sup>44</sup> the requirement that the term was not entered into in good faith;<sup>45</sup> and the effect of wide terms.<sup>46</sup>

31) The judgment at [331].

- 32) Ibid.
- 33) Ibid. at [338].34) Ibid. at [341] to [390].
- 35) Ibid. at [350].
- 36) Ibid. at [352].
- 37) Ibid. at [354]
- 38) Ibid. at [391] to [409].

- 39) Ibid. at [410] to [412].
  40) Ibid. at [425] to [426].
  41) Ibid. at [428] to [467].
  42) Ibid. at [428] to [429].
  43) Ibid. at [430] to [435].
  44) Ibid. at [436] to [452].
  45) Ibid. at [453] to [465].
- 46) Ibid. at [466] to [467].

Having set out the general principles and authorities discussing them, the judge summarised the unfairness test, as it applies to a contract with a DPhil student,<sup>47</sup> indicating the following seven broad principles:

• The effect of the IP terms must be considered as part of the contract for educational services as a whole.

• The impact of the terms must be examined broadly from both sides.

• Account should be taken of whether the terms indirectly serve the interest of the student assignor (for example, assistance with spin outs).

• Consideration should be given to the situation in the absence of the term in question.

• Did the term deliberately take advantage of the DPhil student?

• Do the terms depart conspicuously from the reasonable expectation of a contract of that kind?

• Could the university assume the student would have agreed such a term in an individual contract?

# How the Approach Applies to Contracts with Universities

Having established the general principles to be applied, the judge assessed Mr Jing's DPhil contract and the IP provisions therein.<sup>48</sup> He then set out each side's arguments regarding any *'significant'* imbalance,<sup>49</sup> stating that he would consider the points made by reference to key comparators, primarily focusing on:

(1) The position of a DPhil student in the absence of the terms in question.<sup>50</sup>

(2) The position of comparable employees subject to similar IP terms.<sup>51</sup>

(3) The University's IP provisions as compared with those of other institutions.<sup>52</sup>

With regard to (1), the judge was keen to point out that the position may be more nuanced than it originally seems,<sup>53</sup> stating: 'a student could be better off in terms of raw entitlement but worse off in several other respects'.<sup>54</sup> The 'other respects' include the assistance universities can provide for obtaining patent protection, without which the student could be worse off in obtaining protection, enforcing their rights and monetising the invention.<sup>55</sup>

The judge reverted back to the points made regarding section 39 of the Patents Act 1977 for comparator (2), but does note that the IP provisions go further than the statute. The judge found that ultimately this comparator comes down to 'which employee one takes and the invention in question'.56 Additionally, the judge noted that none of these points would individually determine the claim, they were merely wide commercial comparators to colour the overall decision.57

Regarding comparator (3), ONI relied heavily on the argument that the University's IP provisions were less favourable to students than other institutions. Warning against sweeping principles, the judge commented that evidence is required to show that any particular allocation which appeared out of kilter was so over-time.<sup>58</sup> To assist with this comparator the judge referred to the contents of two articles which he described as '*instructive*' despite not being evidence '*as such*'.<sup>59</sup> These articles demonstrated the wide range of equity sharing conducted by various academic institutions, ranging from 5 to 100 per cent.

- 48) Ibid. at [469] to [493].
- 49) Ibid. at [493] to [502].
- 50) Ibid. at [503] to [505].
- 51) Ibid. at [506] to [510].
- 52) Ibid. at [511] to [525].
- 53) Ibid. at [505].

- 54) Ibid. at [504].
- 55) Ibid.
- 56) Ibid. at [509].
- 57) Ibid. at [510].
- 58) Ibid. at [541] to [543].
- 59) Ibid. at [526] to [543].

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<sup>47)</sup> Ibid. at [468].

Overall, having considered the evidence and the articles, the judge found that none of it showed that it was '*unreasonable or unfair for Oxford to have* ... *50:50*'.<sup>60</sup> The judge then briefly dealt with some of the wider issues as to why the courts should be careful intervening in these agreements<sup>61</sup> and discussing why a '*one-size fits all*' policy can, dependent on the specific facts, be detrimental to either the student or the university.<sup>62</sup>

# Did the Terms in the Present Case Adversely Affect Mr Jing?

Following the above, the judge found that IP provisions were not *'unfair'* to Mr Jing. They did not create a significant imbalance and were not made in bad faith, accordingly they were not contrary to UCCTRs or UCTD and were not void.<sup>63</sup>

# Comment

This was a unique case argued in an atypical manner. It was the first time that issues concerning universities and student investors had come before the UK courts and thus required the judge to engage with the issues and authorities in considerable depth. The result is that despite the answer to each of the questions posed at the start of this article reaching the somewhat predictable legal fallback of *'it depends'*, the judgment has many important takeaways for universities and student inventors alike.

As alluded to in the introduction, the broad issues addressed by this case are not limited to its specific facts. Rather there are potential ramifications for anyone conducting collaborative research at higher education facilities, especially in the life sciences sector where patentable inventions are more common. The terms individuals are contracted under should be considered carefully because, as demonstrated throughout the discussion in the judgment, the particular circumstances of their engagement/employment may well determine where any benefit lies should a commercially viable invention be made.

It is worth noting that the case is currently under appeal and as such the judgment is unlikely to be the final word on these matters. Further, given the increased commercialisation of university inventions through spin outs, it is likely that further disputes such as this will reach the Patents Court soon enough.

62) Ibid. at [560] to [572].63) Ibid. at [602] to [640].