THE HIGH COURT

BETWEEN/

VISUSOFT LTD

PLAINTIFF

AND

ROBERT HARRIS AND ARH SOFTWARE SOLUTIONS LTD.

DEFENDANTS

JUDGMENT of Mr Justice Roderick Murphy delivered 27th day of November, 2009.

This is a dispute as to the copyright in a computer programme and software developed by the first named defendant (Mr. Harris) prior to, during and subsequent to this 15 month employment with the plaintiff.

The two paramount elements of resolution of this dispute are the Copyright Act and the agreements entered into by Mr. Harris, the first named defendant with the plaintiff.

There is no dispute that a computer programme is defined in s. 2 of the Copyright and Related Rights Act 2000 as a programme which is original in that it is the authors own intellectual creation and includes any design materials used for the preparation of the programme.

Section 32 (2) provides that the copyright in a work is infringed by a person who without the licence of the copyright owner undertakes, or authorises another to undertake, any of the Acts restricted by copyright, that is to say to copy the work or make it available to the public or to adapt the work as provided in subsection (1).

Subsection 3 of that section is particularly relevant. It provides that:

> "References to the undertaking of an act restricted by the copyright in a work shall relate to the work as a whole or to any *substantial* part of the work and to whether the part of the act is taken directly or indirectly." (Emphasis added.)

It is not disputed that the copyright owner is Visusoft, the plaintiff. The dispute centres around whether there has been an unauthorised copying of a substantial part of the work which was undertaken by the first named defendant while in the employment of the plaintiff.

The second critical element is the set of agreements made between the plaintiff and Mr. Harris on 11th and 18th May 2005 and the letter of termination of 10th March 2006.

There is a distinction between the general trade knowledge of an ex-employee and the specific knowledge in relation to trade secrets or know-how. In *Printers and Finishers Ltd. v. Holloway and Others* [1964] 3 All E.R. 731, Cross J. was prepared to grant an injunction against a former employee from using written materials of his employers. He was not prepared to extend the jurisdiction of the courts to restrain the ex-employee from putting at the disposal of his new employers his personal skills which necessarily incorporated his memory of particular features of the former employer's plant. This was followed in the judgment of O'Neill L.J. in *Faccenda Chicken Ltd. v. Fowler* [1987] Ch. 117 at 135/136.

This is the general principle which is, of course, subject to the property right in written work of an employer which may be the subject of copyright.

It is clear that information, until reduced in writing or other material form cannot be susceptible of copyright protection. To this extent there is no copyright in ideas. Once the information has been expressed as a work, elaboration of the various elements of information may amount to a part of an original work. Copyright will subsist in its original work. (See Rees and Chalton, Database Law, Jordans, 1998 at p. 7 and Laddie, Prescott and Victoria, *The Modern Law of Copyright and Designs*, 2nd Ed., Butterworths, 1995.)

The question arises as to whether elaboration of information or ideas which is alleged have been borrowed constitutes a substantial part of the copyright work as a whole. The approach adopted by Jacob J. in *Ibcos Computers Ltd. v. Barclays Mercantile Highland Finance Ltd*. [1994] FSR 275 at 289 is as follows:

> "Logically … the claim in copyright calls to be tested in the following order:
> (1) What are the work or works in which the plaintiff claims copyright?
>
> (2) Is such work original?
>
> (3) Was there copying from the work?
>
> (4) If there was copying, has a substantial part of that work been reproduced?

The work in which the plaintiff (Mr. Harris) claims copyright is Risc 7 which was developed by Mr. Harris for ARH Software Ltd., the second named defendant, after Mr. Harris terminated his involvement with the plaintiff on 10th March, 2006. The plaintiff (Visusoft) says that a copy of Datapos which was developed by Mr. Harris for Visusoft, was retained by him and marketed as Risc 7.

The next question is whether such work is original. That is in dispute. Visusoft acknowledges and the defendants assert that the work is based on Risc 5, an earlier version of Risc 7, which was developed by Mr. Harris from about 2001. Both parties agree that from the beginning of 2005 Mr. Harris developed the plaintiff's Datapos system by adapting and developing Risc 5. What is in dispute is the incremental development during the fifteen months Mr. Harris was employed by Visusoft. The originality in that incremental development is governed by the agreements between Mr. Harris and Visusoft.

The Court finds that there was no transfer of the intellectual property in Risc 5 to Visusoft. Accordingly, the issue is only in relation to the fifteen month incremental development.

Visusoft asserted that Catherine McLoughlin, Paul Curran and a third programmer had worked on the development together with Mr. Harris. It was unclear, since neither Mr. McLoughlin nor Mr. Curran gave evidence, as to what contribution was made and when such contribution was made before the termination of Mr. Harris's contract with Visusoft on 10th March, 2006. Mr. Harris appeared to have worked extensively on Datapos from January 2005 to that date. The others may indeed have worked during the latter part of that period and subsequently but this does not seem to the Court to affect the issue of the originality of Risc 5 or of the development of Risc 7 after 10th March, 2006. What is in issue is the originality of the incremental development of Datapos which, it is agreed, is the property of Visusoft. In that regard the agreements are critical.

The third test propounded by Jacob J. is whether there was copying by Mr. Harris of the development of Risc 5 into Datapos. Almost the entirety of this lengthy hearing was devoted to the technical examination and analysis of the 2007 version of Risc 7 and the 2007 version of Datapos.

Elements of Risc 5 were, understandably, found in Datapos though, as Risc 5 was not examined this was not quantified. References to Risc 6 appear to be a reference to Datapos though, as explained by Mr. Arkins, the then managing director of Visusoft, it was not desirable to use the name Risc given that some dispute still existed as to whether it was owned by Mr. Harris or the company for which he worked at the time.

There was some indication by Mr. O'Duffy, an expert called by Mr. Harris, that he had found elements of Risc 7 in the Datapos programme. There was evidence of varying degrees of copying of Datapos 2006 into Risc 7. While the defendants' expert Mr. Halpin, Mr. Le Breton and Mr. O'Duffy did not believe this to be substantial, they did find some degree of copying. What was clear was that Risc 7 was not just a copy of Datapos as claimed.

In direct examination Mr. Arkins, the managing director of Visusoft, had maintained that Datapos developed by Mr. Harris was identical to Risc 7 which was later marketed by him. In cross-examination he agreed that there were some differences which corresponded with the evidence of each of the experts. It was a degree of difference that was critical.

Mr. Arkins evidence was that Visusoft had purchased these and existing Risc product from Mr. Harris when it was put to him in cross-examination that software not developed by Mr. Harris with Visusoft was not the property of Visusoft. The Court does not accept that evidence as the written agreements do not refer to any transfer of Mr. Harris's rights in any existing product. The Courts interpret these agreements *contra proferentem* and note that Mr. Harris was not legally advised in relation thereto. This issue is of critical importance in the overall assessment of the case.

The Changes to the Software Agreement of 11th May 2005 may have presupposed a previous agreement but no evidence was given as to the terms, date or scope of such agreement. There was no evidence of an oral agreement. It was clear that Mr. Harris's role as development director did not, at first, encompass the development of his (or of his previous employers risk product) as a Visusoft product.

That agreement between the parties and the evidence and, indeed, the averment of Mr. Arkins was that all software developed by Mr. Harris since 17th May, 2004, including the entire Datapos system, was beneficially owned by Visusoft. This does not, accordingly, include Risc 5. There is no evidence of any agreement by Visusoft to purchase the Risc product. Indeed the acknowledgment that the change of name was to avoid difficulties as to others having a claim seems an admission that Visusoft did not own the rights to Risc 5. However, there was no evidence before the Court that anyone other than Mr. Harris owned Risc 5.

It is further clear that clause 6 of that agreement of 11th May, 2005 referred to software developed since 17th May, 2004 which was to be delivered by 30th June, 2005 and in respect of which Mr. Harris would receive a shareholding in Visusoft. This, implicitly acknowledged that the work already undertaken by Mr. Harris had been substantial.

The letter of 10th March, 2006 from Mr. Arkins to Mr. Harris purported to be in full and final settlement of all Mr. Harris's claim against Visusoft. This included implicitly any right he had to shares in Visusoft.

Mr. Harris's letter of 20th March confirming that he had removed all copies of source code and components from his computers and from any other media onto which he may have made copies was followed by a statement that:

> "I no longer hold any copies of source code and components whatsoever."

Mr. Harris confirmed that he was fully aware of his obligations and assured Visusoft that he would honour that obligation.

That should have been the end of the matter. Had Mr. Harris developed Risc 7 from the Risc product extant as of 17th May, 2004 or later when he began full time work with Datapos and had so developed Risc 7 without reference to the Datapos product it is unlikely that Visusoft could have succeeded in proceeding against him.

However in his own admission, Mr. Harris did retain a version of Datapos which he deleted in panic. Moreover it would appear that his files were deleted, either by remote access or by Mr. Harris's use of SDelete, so there is no evidence as to whether the source code of Datapos was retained.

On the balance of probabilities and on the express evidence, including the evidence of Mr. Harris's own experts it seems to the Court that Mr. Harris had access to the source code of Datapos. It also seems probable that this source code had developed, through Mr. Harris and others endeavours, beyond the source code of Risc.

It is significant that when Mr. Harris became aware that he retained a version of Datapos he did not disclose that fact to Visusoft and was, accordingly, in breach of his obligation. The deletion by Mr. Harris occurred after litigation had commenced.

While there may have been a possibility of hacking or remote access of his computer as proposed by Mr. McCormack who gave evidence on Mr. Harris' behalf, the preponderance of the evidence, which, on the balance of probabilities the Court must accept, is that external access was unlikely. Even if this were not so, there is no evidence and only conjecture that access was made by or on behalf of Visusoft.

The Court accepts Mr. Arkins evidence that Visusoft had no interest in removing evidence that would support Visusoft's case in his view.

Geoffrey Keating, managing director of Input Systems Ltd., business counting systems developer who had previously worked with Mr. Harris, examined Risc 7 and Datapos. Mr. Harris objected to his giving evidence because of their working together previously. Mr. Keating found three elements in Delphi language which he described as graphical user interface, databases and source code, to be similar, and in some cases, identical. The degree of similarity he believed was 90 to 95%. If both had been developed separately there would be no such similarity.

He found that many files had the same name. Mr. Keating's report referred in detail to barcode functionality and the calculation of marginal price.

Mr. Keating examined the most up-to-date version of Risc 7 (including source code) and compared it with the Datapos software. As a result of his examination he was certain that the software in Risc 7 was, in computer terms, almost identical to the Datapos software. While there were cosmetic changes to the appearance of a screen, given the absolutely identical lines of programming which he found in so many areas of the source code, it was a matter of certainty that one was copied from the other. He believed that Risc 7 was not an updated version of Risc 5 with which he was familiar. The Court, in the light of the other expert evidence cannot accept such a high degree of similarity.

Mr. Keating believed that Mr. Harris's assertion regarding the deletion or removal of software from his computer by way of external hacking was for a variety of technical reasons not plausible and, in some respects, technically possible. He believed that the claim that 17 months of the work of the defendants had been erased was inconsistent with the dates of file modification and the up-to-date version including changes made up to 27th July, 2008. The Court agrees with this conclusion.

Mr. Colm Murphy, technical director of Espion Ltd., which dealt with information security and forensic analysis prepared a draft report on 23rd September, 2008 and swore two affidavits in respect of his analysis.

The report based on forensic analysis of the alleged hacking incident and a second on the defendants' computers for any reference to Datapos, found a complete copy of the Datapos software programme and source code and a significant number of other related Datapos files in a directory called "advprog". This was found on the defendants' main server computer ARHServer 1. This directory had been deleted in the normal manner on or after 21st March, 2008.

There was no evidence on the hard disc that it had been subject to a hacking incident. Espion had concluded that there was no evidence to support Mr. Harris's claim that additional accounts had been created and deleted. The secure deletion was most likely performed by someone in physical possession of the computer disc. The computer was running "Windows firewall" and the most recent security batches and updates from Microsoft reducing the possibility of a hacking incident were installed. The computer was configured to disallow remote desktop connection.

Espion examined four additional computers. Two were used by Mr. Harris for software development identified as Robdev 1 and Robdev 3. There were also two laptop computers identified as Dell 1 and IBM Thinkpad. A Datapos directory on Robdev 1 was deleted on 19th August 2008 in a manner consistent with the SDelete tool which had been installed some minutes earlier.

Mr. Murphy's firm performed a source code valuation of key files of both software programmes of Datapos and Risc 7. His evidence was that source code gives a software programme its uniqueness. He concluded that there was a large number of similarities between the products. They shared a common directory structure. Variable and form names were similar to the TEST.MENU and TEST.MNU files. The source code directories contained 50 out of 300 files with identical names. The file and uFrmVIEWINVOICE.pas could not have been created without access to the Datapos version.

The source code in Risc 7 was created in such a way that it was based largely on that of Datapos and could not have been created independently. If one were to re-write a story without reference to the published book there would be substantial differences. The report could not give any explanation for the significant number of identical lines of source code other than outright plagiarism.

Mr. Harris cross-examined Mr. Murphy on the extent of shared code and the reference to Datapos in Risc 7. Mr. Murphy agreed that there was reference to Risc 6 in Datapos but no reference to Risc 7. Risc 6 was in the source code but was not in the executable code.

When queried on the common use of naming conventions resulting in similarities Mr. Murphy said that did not explain similar codes. Mr. Murphy agreed that many codes were generated by a computer compiler. Mr. Murphy agreed that it is possible to hack into a computer but disagreed that that was so in this case as there was no trace of hacking.

The Court acknowledges the thoroughness of Mr. Murphy's analysis.

Mr. O'Duffy, giving evidence on behalf of Mr. Harris, found that the shared code was 8% relative to the size of Risc 7. It was not a copy. He believed that Mr. Colm Murphy's analysis gave no importance or role to the code analysed while Mr. Halpin's analysis was more holistic. He was not an expert in the approach of Mr. Murphy. The 25 files with common

ancestry had little functionality but, while he could not say how significant it would be if they were deleted, he would be concerned if they were absent.

The greatest degree of copying was of the Datapos version of 2006. Mr. Murphy had analysed the 2008 version which had additional programmes which were common. The Court notes that Visusoft had access to Risc 7 in 2008 when Mr. Noel Aherne acquired a copy from BW, a common customer of Mr. Harris and Visusoft but this does not prove that Datapos had copied from Risc 7. However Mr. Duffy was not shown the team coherence report nor had he seen the development work for Risc 7. Mr. Harris had no independent records of different drafts of the programme. The Court observes that this hindered the investigation of all experts in assessing the development of Risc 5 through Risc 7.

He said that neither he nor Mr. Halpin had found it impossible for Datapos to be a copy of Risc 7. This assertion falls short of positive evidence.

The memorandum of Mr. Harris of 24th September, 2004 was significant. It refers to Datapos having been developed over the previous two years, that is at a time when Mr. Harris had not been working for Visusoft. Notwithstanding, Mr. Harris referred to what he had developed as Datapos possibly because he wanted to distinguish it from work he had undertaken for a former employer or, alternatively, because he had already begun to develop Risc 7 for Visusoft or that he had transferred his interest in Risc 5 or Risc 7 to the plaintiff. There is no evidence of that alternative. There is no agreement as to the transfer of either.

The Court finds that Mr. Harris did retain and copy elements of the work he had done for Visusoft.

This leads to a consideration of the fifth test: that of substantiality. The question arises as to whether that work constitutes a substantial part of Datapos as a whole.

Section 32 (3) of the Copyright and Related Rights Act 2000 referred to an act restricted by the copyright in a work as relating to the work as a whole or to any substantial part of the work.

Substantial part is not defined by the Act and is, accordingly, a matter of fact (*Ledbroke v. William Hill* [1964] 1 W.L.R. 273 per Evershed L.J.) Hadson L.J. observed in that case that:

> "Substantiality depends on quality not quantity as is illustrated by the case of *Hawkes & Sons (London) v. Paramount Film Services Ltd*. [1934] Ch. 593."

Substance, from the Latin *substantia*, to stand under would seem to refer to substratum, being, essence, material property. A substantial part is therefore, in a strict sense, an essential part.

The Shorter English Dictionary on Historical Principle (1973 edition, reset with corrections, 1987) gives the first three meanings as:

1. Essential nature, essence

2. Philosophically, a being that subsists by itself: a separate or distinct thing

3. That which underlies phenomena: the permanent substratum of things.

The Court has heard the evidence of the experts which range from that of Mr. Keating that Risc 7 contain 90 – 95% of Datapos to Mr. O'Duffy's estimate of 8%.

Mr. Murphy and Mr. Halpin coming from different approaches and making different assumptions have concluded that there is a more significant degree of copying.

Pumfrey J. in *Cantor Fitzgerald International v. Tradition (U.K.) Ltd*. [2000] RPC 95 has reviewed the authorities. He held that generally, a work is a single entity which cannot be divided into parts. It is necessary to look at the substantiality of the skill and labour expended on that which is taken (para. 76). There is no doubt that Mr. Harris did use his skill and labour for a period of some fifteen months in developing Datapos. There are also elements of Datapos in Risc 7 on his own experts' evidence. Accordingly, the skill and labour expended on that which was taken becomes the property of the plaintiff if it is a substantial part of Risc 7.

While every part of a computer programme might be essential to its performance the Court held in *Cantor Fitzgerald* that it was simplistic to regard every part, however small, as a "substantial part" of the programme (para. 74-75).

Pumfrey J. said that as far as English law was concerned the correct approach to substantiality was straightforward:

> "It is the function of copyright to protect the relevant skill and labour expanded by the author on the work. I say relevant skill and labour because (for example) a purely literary contribution is not relevant skill and labour so far as an artistic copyright is concerned, the latter being concerned purely with visual impressions."

I have no doubt that the plaintiff is entitled to protect the relevant skill and labour expanded by Mr. Harris on their behalf. However while there is clear evidence of elements of Datapos in Risc 7 I am not satisfied that, given that codes can be generated by computer, that there are common ancestry files, given in particular, the further elaboration by Mr. Harris from March 2006 to the launch of Risc 7 in January 2007, and to the evidence of the customers of the defendants that the elements of Datapos in Risc 7 constitute a substantial part of Risc 7 either in the dictionary meaning or in the case law. The elaboration appears to be more a function of the commonality of Datapos and Risc 5. The substratum of Risc 7 is more Risc than Datapos.

However this does not end the matter. Mr. Harris retained a copy of Datapos and, probably, the source code of Datapos. In *Cantor Fitzgerald* the loading of the whole of the plaintiff's source code into the defendant's computer was in itself an infringement of copyright (para. 10). In the present case Mr. Harris had the copy of Datapos and its source code while working with Visusoft.

Nonetheless, Mr. Harris is clearly in breach of the agreements of 11th and 18th May, 2005 and more appositely, the undertaking given in his letter of 10th March, 2006.

He is, accordingly, in breach of contract. The Court will hear the parties regarding the issue of damages which arise from the breach of agreement.