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Information Technology Alert
Copyright infringement and computer programming: a wide scope for narrow parameters?

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In a very recent landmark decision, the Federal Court of Australia has determined that copyright subsisted and was infringed in both source code and macro commands. Justice Bennett's decision in *CA, Inc. v ISI Pty Limited* [2012] FCA 35 heralds a significant step in the evolution of copyright law and its application to computer programs. This decision:

- is the first Australian case that has found that copyright in a macro command can be infringed;

- identifies the difficulties in proving that copyright subsists in a particular software program or source code;

- highlights the issues with the form/function delineation in determining whether that copyright has been infringed; and

- confirms the critical importance of having strong contractual obligations of confidentiality to protect source code.

The judgment is lengthy (over 100 pages), extremely technical and complex. However, to understand the issues properly it is necessary to consider the facts in some detail.

The facts

The applicant (**CA**), an international software company, owns a database management system (**Datacom**) which stores and processes information in large-scale databases. In order to use Datacom, its licensees must attach to their own written applications, a program called a 'User Requirement Table' (**URT**). The URT, through the use of macros, provides the gateway through which the licensee accesses the Datacom database, and identifies the resources required by the licensee's applications.

A macro is a command that causes a sequence of other functions to be executed, so that the overall effect of performing a more complex function is achieved. It is used for programming efficiency. CA provided five URTs (**CA URT Macros**) to licensees in source code, which permitted the licensee's applications to function.

IBM released a competitive product (**DB2**) which was incompatible with Datacom. As a result, the respondent (**ISI**) developed a program called **2BDB2** which facilitated the conversion from Datacom to DB2 by converting Datacom data into a DB2-compatible format. They provided this service to Macquarie Bank (and others), to allow the database to remain operable during the data migration process from Datacom to DB2.

The copyright and confidentiality issues arose because, once the process of conversion from Datacom to DB2 was complete, URTs were required to replace the CA URT Macros. The macros used by ISI's program (**ISI Replacement Macros**) triggered the generation of new URTs only once the data migration process was complete. It was the intermediate period that was the source of the controversy.

Confidentiality

CA successfully claimed for breach of confidentiality of its Datacom information, comprising the Datacom source and object codes, the CA URT Macros' source code and the 'Key CA Manuals' used by licensees to run Datacom. Of particular interest was Justice Bennett's finding that the source code of the CA URT Macros was confidential information.

CA had been very careful with the information. When issued to licensees, the CA URT Macros imported the same confidentiality obligations as the other components of the Datacom information. It had exercised cautionary

internal and external security measures to ensure that persons with access to the Datacom programming information were bound by duties of confidentiality. For example, Macquarie had undertaken that its employees would not reverse engineer or allow others to reproduce any part of the program. The Court found that the Datacom information had been imparted to ISI in circumstances importing an obligation of confidence.

The copyright issues

The copyright issues are novel and complex.

CA argued that copyright subsisted in Datacom and the CA URT Macros, and that the ISI Replacement Macros reproduced a substantial part of those works.

In order to determine subsistence, the Court needed to consider whether the works were 'literary works' and/or a 'computer program' under the *Copyright Act 1968* (Cth) (**the Act**). Pursuant to the Act, a 'literary work' is defined as including *'a computer program or compilation of computer programs'* and 'computer program' means *'a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result'*.

Datacom

Justice Bennett confirmed that you need to consider only <u>functionality</u> (rather than a textual analysis of the code) in determining whether a work is a 'computer program'. This difference may have an impact on infringement as a finding that a substantial part of the 'computer program' (ie functionality) has not been reproduced does not necessarily mean that a substantial part of the 'literary work' has been reproduced. Here, Justice Bennett determined Datacom was clearly a computer program and because CA relied on Datacom's functionality it was unnecessary to consider whether it was a 'literary work'.

CA URT Macros

ISI argued that the macros are nothing more than *'a piece of data'* and that they are not a *set of instructions* (as required under the Act) otherwise, 'every snippet of code that was ever written' could potentially be a computer program under the Act. It also argued that the macros were not a set of instructions as they required the use of other components to achieve any result.

In finding that the macros were a 'computer program' Justice Bennett emphasised the function of the word *'indirectly'* in the definition of 'computer program'. This element meant the macros would fall within the definition despite the fact that they required interaction with other programs.

The Court found that CA had not properly explained how Datacom and the CA URT Macros could be 'literary works' under the Act. However, her Honour acknowledged their existence as 'literary works' was a logical step from the conclusion that they were 'computer programs'.

Reproduction of a 'substantial part' of Datacom

In order to prove copyright infringement an owner must show that a substantial part of the work has been copied. CA had difficulties in proving this. Justice Bennett held that CA's evidence did not prove Datacom's functions as a whole and therefore she could not assess whether a substantial part had been copied.

Reproduction of a 'substantial part' of CA URT Macros

Whether the ISI Replacement Macros reproduced the CA URT Macros involved consideration of qualitative (assessing functionality) and quantitative (textual analysis) elements. Justice Bennett found that for a substantial part to be copied, it must extend beyond performance of the same function and must possess a similarity of parameters (which Her Honour also described as 'expression' or 'form').

A number of macros had been used by ISI throughout the years. CA claimed that each of them infringed its copyright. The ISI Replacement Macros for 1999, 2004 and 2005 were found to be objectively similar and copied from the CA URT Macros (as the 1999 macros were based on the CA macros and the 2004 and 2005 versions were based on the 1999 work).

Her Honour found that the 1999 macros reproduced a substantial part of the CA URT Macros (although CA failed to establish that their use was within the applicable limitation period) because they:

- showed textual similarity;
- had identical names;
- utilised CA's first and second-level Macros which function to produce a final URT;
- created the final URT; and
- included the same parameters as the CA URT Macros (including parameters not used for the DB2 program).

ISI had added further material to the 2004 and 2009 macros. However, that additional material did not prevent infringement.

Her Honour found that the 2011 macros were ISI's original work and did not infringe. This was an important finding. This version was created with the author's knowledge of

the 2004 and 2009 groups and the macros shared essentially the same function of the CA URT Macros. However, her Honour found that the author rewrote the parameters for the 2011 version, and did not collaborate in the creation of the 1999 group. The fact that the author understood how the CA URT Macros worked and rewrote the 2011 group into a different form (albeit fulfilling the same function) using his own sill and knowledge was enough to break the causal connection.

Conclusion

This is an important decision and will have repercussions for the IT industry, particularly for software developers and licensors because:

- It raises interesting questions about copyright protection in the form or function of a computer program. Where the functionality of an alleged infringing program is found to be identical to the program protected by copyright, the scope for form to vary is potentially narrow. The less multi-dimensional the function with which a program is tasked, the less complex the 'message' required to command the program, and the narrower the scope for variability within programmers' written parameters. Given that in addition to lexicon, word-ordering and command prompt ordering, the 'expression' used in programming encompasses factors as nuanced as spacing, capitalisation and punctuation, it will be interesting to witness further case law development on how intricately the Courts are willing to adjudicate this.

- It highlights the difficulties in proving copyright subsistence and infringement in a computer program.

These are highly technical, substantial and sophisticated works that are difficult to define, explain and analyse. Justice Bennett made a number of comments regarding the difficulties in assessing the conflicting evidence, particularly when the submissions did not adequately address the issues. Therefore, parties will need to take particular care in how they present their case to the Court.

- The determination that source code can be confidential material highlights the importance of incorporating confidentiality clauses into licence agreements and effectively imposing those duties on third parties. Many firms spend a significant amount of time and effort creating those codes, so they should ensure that they are properly protected.

The case is ongoing as the issues of quantum have not yet been determined. Given the legal and commercial importance of this decision, an appeal may be imminent.

Written by:

Joshua Henderson
Senior Associate
+61 7 3338 7507
jhenderson@thomsonslawyers.com.au

Julia Connelly
Lawyer
+61 7 3338 7560
jconnelly@thomsonslawyers.com.au

For further information, please contact:

Peter Le Guay
Partner
+61 2 8248 3424
pleguay@thomsonslawyers.com.au

Tony Conaghan
Partner
+61 7 3338 7502
tconaghan@thomsonslawyers.com.au

Ben Coogan
Partner
+61 7 3338 7503
bcoogan@thomsonslawyers.com.au

Matthew Prescott
Senior Associate
+61 8 8236 1147
mprescott@thomsonslawyers.com.au

www.thomsonslawyers.com.au