Case Notes

Computer Locks and US Copyright Law

Atari Games Corporation v Nintendo of America Inc

by Caterina Cosentino

Facts

This was decision of the United States District Court of the Northern District of California handed down in March 1991.

Nintendo of America Inc and Nintendo Co Limited ('Nintendo') brought an action for a preliminary injunction to restrain Atari Games Corporation and Tengan, Inc ('Atari'), their directors, employees and agents from copying, selling, distributing or using in any way the Nintendo IONES program or the Atari Rabbit program.

The Nintendo Entertainment System ('NES') uses a security system which prevents non-Nintendo cartridges from being played on the game console. The security system consists of a patented computer chip located both in the NES and in authorised game packs. The chips contain the copyrighted IONES program (or a successor program) which enables the console and the cartridge to communicate with one another in a way that allows the game to be played. It is generally true to say that unauthorised games lacking in the program cannot be played on the NES.

From about 1986, Atari attempted to analyse the Nintendo security system with the objective of understanding and copying it. Initial efforts failed. Later Atari attempted to 'de-process' the chips used in the security system. Atari's engineer was able to read the object code in the chip but did not succeed in under-

standing or copying the security program. In December 1987, Atari became a Nintendo licensee and was authorised to sell Nintendo-compatible game cartridges without knowing how to overcome the security system.

In January 1988, Atari wrongfully obtained Nintendo's copyrighted program from the US Copyright Office by stating in an application that Atari was the defendant in an infringement action and needed a copy of the program for the purposes of the litigation. Infringement claims against Atari were not filed until November 1989. Atari admitted that it used the Copyright Office documents to learn which microprocessor Nintendo used. By comparing the information obtained from the Copyright Office with copies of the object code read through microscopic examination of the deprocessed chips, Atari employees were able to correct and verify their first copies of the Nintendo program and produced the Atari Rabbit program. Atari copied elements of IONES which were unnecessary for the functioning game cartridge. Atari then breached its licensing agreement with Nintendo and initiated the current litigation in December 1988.

At the hearing, the parties submitted expert evidence regarding the similarities between the Nintendo and Atari programs. Nintendo's experts stated that the structure, sequence and organisation of the Atari Rabbit and the Nintendo IONES programs were 'remarkably similar'.

Atari's experts stated that Nintendo's experts failed to examine why the similarities existed. According to Atari, the aim in developing the Rabbit program was to render the Atari game's chip functionally indistinguishable from the Nintendo chip, thereby precluding Nintendo from altering its future base units in a manner that would selectively exclude Atari games cartridges. In Atari's opinion, the programs similarity arose because of either the requirement of function or the use of standard programming techniques. Atari did not dispute that it could have copied less of the IONES program to obtain a functioning key program.

Nintendo argued that Atari infringed its copyright both by copying the IONES directly and by creating derivative work substantially similar to the IONES. Atari's response was that the similarities which were copied were not subject to copyright and the Atari was entitled to create a program which would be functionally indistinguishable from the IONES. Atari also claimed: that Nintendo 'conceded' that the functional elements of the security system were not copyrightable; that the purpose of breaking the lock could not be prohibited; and that if Atari were allowed to break the lock as it existed it is allowed to pre-empt all future variations on the lock.

Decision

Smith J made the orders sought by Nintendo and some consequential

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orders in relation to security for costs and notice to be given to distributors.

For Nintendo to succeed, it was required to show that it had '...either a likelihood of success on the merits and probability of irreparable injury or that serious questions going to the merits raised the balance of hardships sharply in its favour'. As the Court concluded that a preliminary injunction was appropriate under the first part of the test it was not necessary to consider the second part.

Smith I noted that Atari relied on the 'merger' doctrine to argue that Nintendo would lose its infringement action. Under this doctrine, courts could withhold copyright from a work's original expression where the work's central idea can effectively be expressed in only one way, that is where the work's idea and expression merge making the work as a whole unprotectable. Atari argued that the idea of the IONES system was very narrow, namely, authenticating games for play on the Nintendo machine for all time or at least until Nintendo is willing to lock its own games out of the system along with Atari's games. It further argued that the similar features between IONES and Rabbit programs were absolutely necessary to the Rabbit's intended purpose of rendering the Atari games key chip functionally indistinguishable from the Nintendo key chip. Smith J

rejected this and considered that a comparatively broad view of the program's idea might be quality control for a computer. The judge noted Atari's concern that this notion was broad but declined to adopt Atari's more limited specification. Smith J held that Atari's conception of the idea of the IONES program would diminish the copyright protection available for computer programs and would give the would-be infringer the right to determine what is important in a copyrighted work.

Smith J noted that Atari also argued that preliminary analysis of the competitor's program did not in and of itself establish pirating. Smith J observed that the line of authority relied upon by Atari only gave approval to 'surveying the general outline' of an existing program than applying imagination, creativity and independent thought.

Smith J held that Nintendo could copyright an idea but stated that Atari was not free to appropriate Nintendo's specific technique for locking its own game console. Nor could it identify changes that it feared Nintendo could make to its copyrighted program and redefine those features as functional and, therefore, unprotected. The judge held that aspects which are nonfunctional at the time of copying are not made functional by the infringer's efforts to pre-empt reactions to its infringement.

Atari had claimed in relation to its behaviour with the Copyright Office, that it had already successfully copied the object code from the deprocessed chips before using the information from the Copyright Office thereby making the 'stolen' code superfluous. Smith I concluded, on the evidence, that Atari had obtained access to Nintendo's copyrighted IONES program for an improper purpose and rejected Atari's claim that it was entitled to use copies of Nintendo's object code irrespective of the source from which it had been obtained.

Comment

This case is important in the light of the High Court's recent endorsement of the merger principle in Audodesk Inc and Anor v Dyason & Ors. In Australia, as in the Us, where an expression of an idea is inseparable from its function, it forms part of the idea and is not entitled to protection of copyright. Despite this general principle, both Australian and Us courts found copyright to subsist in computer program lock devices and this copyright to have been infringed.

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Footnotes

1 (1992) AIPC 90-855