

**Homework 9: Patent Liability Analysis**  
*Due: Friday, March 31, at NOON*

**Team Code Name: The Soviet Challenge**

**Group No. 6**

**Team Member Completing This Homework: Joe Davidson**

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NOTE: This is the second in a series of four “professional component” homework assignments, each of which is to be completed by one team member. The completed homework will count for 10% of the team member’s individual grade. It should be a minimum of five printed pages.

**Evaluation:**

Component/Criterion	Score	Multiplier	Points
Introduction and Summary	0 1 2 3 4 5 6 7 8 9 10	X 1	
Results of Patent/Product Search	0 1 2 3 4 5 6 7 8 9 10	X 4	
Analysis of Patent Liability	0 1 2 3 4 5 6 7 8 9 10	X 2	
Action Recommended	0 1 2 3 4 5 6 7 8 9 10	X 1	
List of References	0 1 2 3 4 5 6 7 8 9 10	X 1	
Technical Writing Style	0 1 2 3 4 5 6 7 8 9 10	X 1	
<b>TOTAL</b>			

**Comments:**

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## 1.0 Introduction

The Soviet Challenge is a handheld, portable, Internet-enabled version of the popular computer game, Tetris. The game play mechanics of Tetris cannot be copyrighted [1], and neither Alexey Pazhitnov, the game's creator, nor The Tetris Company have filed a patent for the game mechanics. There is no potential for infringement with regards to the game of Tetris. However, the name "Tetris" is trademarked, so its use in any potential marketing of the Soviet Challenge is limited. The game implements the Tetrinet protocol to enable play with others over the Internet. This protocol is not patented and is free to use by whomever wishes to implement it.

## 2.0 Results of Patent and Product Search

U.S. Patent #6,461,242, "Operating device for an image processing apparatus," filed April 9, 2001, describes "[an] operating device for use with an image processing apparatus which displays an image on a display screen and controls the image includes a hand-holdable housing having a shape capable of being grasped by a left hand and a right hand. [ . . . ] A receiving portion is operable, in use, to receive a function expansion device and a connector associated with the receiving portion connects to a function expansion device." This patent was assigned to Nintendo Co., Ltd., for its Nintendo 64 controller, which contains an expansion socket. [2]

The Soviet Challenge could potentially infringe upon Claim 1, which claims "An operating device for use with an image processing apparatus which displays an image on a display screen and controls the image, said operating device comprising: a hand-holdable housing having a shape capable of being grasped by a left hand and a right hand; a first operating device formed on said housing; a second operating device formed on said housing, one of said first operating device and said second operating device being operable for use as a first moving direction designation input device which designates a moving direction of said image and the other of said first operating device and said second operating device being operable for use as an action designation input device which designates other actions of said image; a receiving portion which is operable, in use, to receive a function expansion device; and a connector associated with said receiving portion for connecting to a function expansion device, whereby a function expansion device, for providing an expanded function for said image processing apparatus by sending data

to and receiving data from said image processing apparatus, is detachably attached to said connector and received by said receiving portion when attached.”

In March 2006, Nintendo published a version of Tetris, called Tetris DS, playable on its handheld, battery-operated, network-enabled game console, Nintendo DS. Tetris DS has the ability to connect to Nintendo Wi-Fi Connection through the console’s embedded 802.11b network controller. Once connected to Nintendo Wi-Fi Connection, a player can play variations of Tetris with up to three other players who are also connected to the service. Tetris DS can be played offline with up to ten players who are geographically close, using Nintendo’s proprietary wireless protocol. Both the Soviet Challenge and Tetris DS use the 802.11 protocol to connect wirelessly to the Internet to play Tetris with other players. No pending patents are listed in the game’s documentation or on the game’s promotional website. [3, 4, 5]

In 2004, THQ published a version of Tetris, called Tetris Worlds, for Microsoft’s Xbox video game console. Tetris Worlds has the ability to connect to Microsoft’s Xbox Live online service through the Xbox’s embedded Ethernet port. Once connected to Xbox Live, a player can play several variations of Tetris with up to three other players who are also connected to the service. Both the Soviet Challenge and Tetris Worlds can connect to the Internet to play Tetris with other players. No active or pending patents are listed on the game’s promotional website or the Xbox Live website. E-mails sent to Microsoft regarding patents related to Xbox Live were unanswered. [6, 7]

### **3.0 Analysis of Patent Liability**

The wording of patent #6,461,242’s claims seems to indicate that the patent is intended to be for a device that is external to the “image processing apparatus.” The Soviet Challenge contains the “image processing apparatus,” “operating device,” “function expansion device” interface, and the means of “sending data to and receiving data from said image processing apparatus” in a single “hand-holdable unit.” It is not ever explicitly stated, however, that the components must be physically discrete. The Soviet Challenge could potentially infringe on Claim 1, with the device itself being the “hand-holdable unit,” the ATmega 2561 being the “image processing device,” the directional pad being the “first operating apparatus,” the remaining buttons

functioning as the “second operating device,” the CompactFlash socket and socket housing being interpreted as a “receiving portion and connector,” and the CompactFlash NIC itself acting as the “function expansion device.”

Both the Soviet Challenge and Tetris DS can connect to the Internet wirelessly to play Tetris with competitively, but several other aspects distinguish them. Tetris DS is software only; a Nintendo DS console must be purchased to use it. Additionally, Tetris DS players can only play against other owners of the game; users of the Soviet Challenge can play against anyone who has a Tetrinet client, of which one is available for every major operating system. Finally, if the Nintendo Wi-Fi Connection program ever ends, Tetris DS will be unplayable online; Tetrinet will be playable online as long as the Internet exists.

Both Tetris Worlds and the Soviet Challenge provide an opportunity to play Tetris with other players worldwide over the Internet. Like Tetris DS, in order to play Tetris Worlds, the additional purchase of an Xbox console is required. In order to play Tetris Worlds online, not only must one own an Xbox console, he must also subscribe to Microsoft’s Xbox Live service. Furthermore, Tetris Worlds requires a wired broadband connection; wireless play is impossible. Like Nintendo Wi-Fi Connection, Xbox Live probably is not immortal. Should the service ever be cancelled, Tetris Worlds will become unplayable online. The Soviet Challenge implements the open Tetrinet protocol, which is likely to exist as long as the Internet does.

#### **4.0 Action Recommended**

The argument for the infringement on patent #6,461,242 is valid based on my interpretation of Claim 1. If the Soviet Challenge were to be sold commercially, either royalties would need to be paid to Nintendo or the entire physical design of the device would need to be reevaluated. The device depends on a two-handed grip for control and the use of a CompactFlash card for network communication. Neither of these features can be removed, so payment of royalties is the only option.

#### **5.0 Summary**

A potential infringement on a patent held by Nintendo was identified and addressed. The only viable solution is to license the invention from Nintendo. Two commercial products were identified that share the Soviet Challenge’s main function, the ability to play Tetris with other

players over the Internet. Both products require the purchase of additional software, and both products require the use of a proprietary networks and protocols. Furthermore, the means by which the Soviet Challenge enables online play differ substantially from Tetris DS and Tetris Worlds.

### List of References

- [1] U.S. Copyright Office, “Games”  
<http://www.copyright.gov/fls/fl108.html>
- [2] Takeda, et al, “Operating device for an image processing apparatus”  
<http://tinyurl.com/kvhxg>
- [3] Nintendo, “Tetris DS”  
[http://www.nintendo.com/gamemini?gameid=SHMfI4-pd\\_DDhbipYkb631-LunYD1UhC](http://www.nintendo.com/gamemini?gameid=SHMfI4-pd_DDhbipYkb631-LunYD1UhC)
- [4] Nintendo, “Nintendo Wi-Fi”  
<http://www.nintendowifi.com/global/index.jsp>
- [5] Nintendo, “Tetris DS Instruction Booklet”  
<http://media.nintendo.com/mediaFiles/-tcqEJA9-60cdPjSJJcT5ZSx07x-pX3w.pdf>
- [6] THQ, “Tetris Worlds”  
[http://www.thq.com/tetrisworlds/Features\\_Xbox.html](http://www.thq.com/tetrisworlds/Features_Xbox.html)
- [7] Xbox Live, “Tetris Worlds Online Edition”  
<http://www.xbox.com/en-US/games/t/tetrisworldsonline/>