



Patently Strategic Musings

KRISTEN J. HANSEN | October 4, 2022

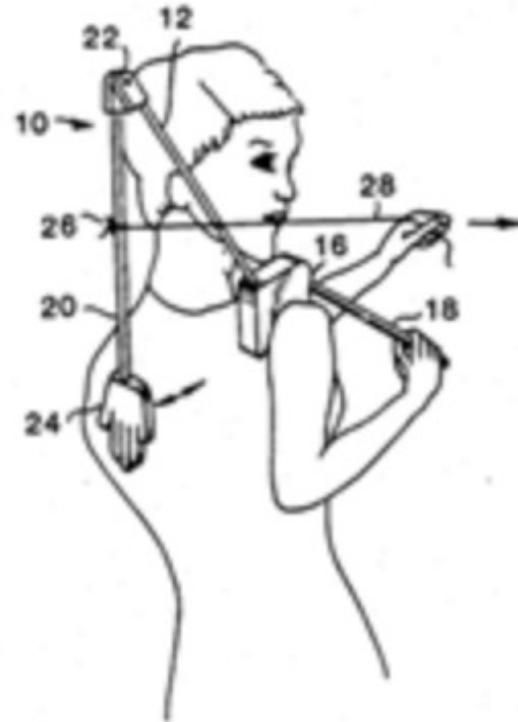
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WELCOME! – Format

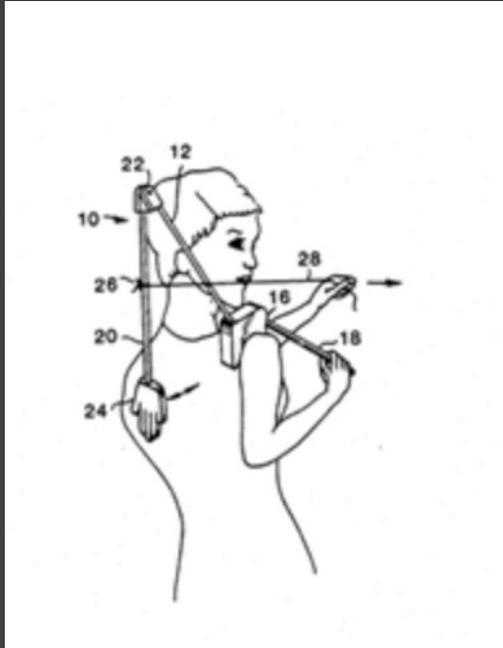
- 10 Minutes Ice: Breaker
- 15-20 Minutes: Problem Solving
- 30-35 Minutes: New Material

Ice Breaker

- What is this patent?



Abstract: It is a [self-congratulatory device](#) with a simulated hand that swings and contacts the user's back and pats it. So the next time you achieve something, pat yourself on the back!

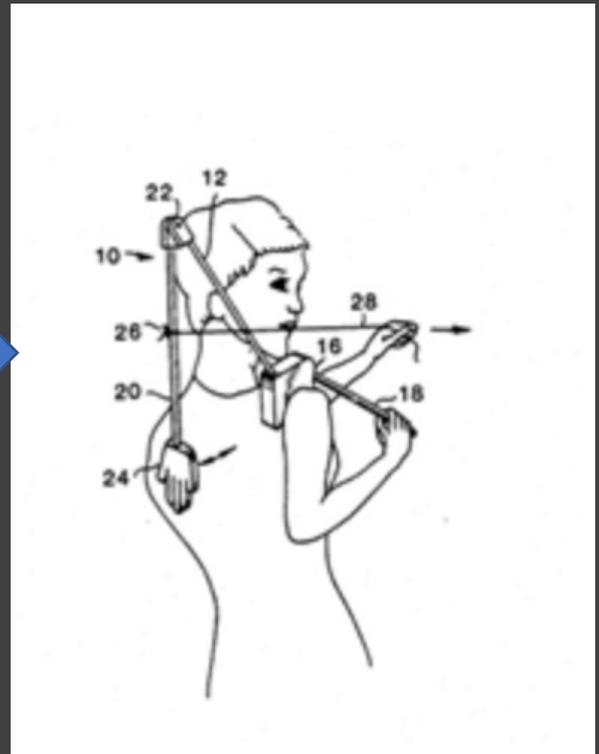


Applicant Name: Ralph R. Piro

Patent Number: [4,608,967](#)

Date of Grant: 02/09/1986

When you're proud of something
and nobody cares



Shared Problem Solving

- Fun Strategy Tidbits?
- Any problems you are encountering with the USPTO?
- Any practice issues arising?
- Any technical issues you are facing?

The Metaverse - Overview

- What is the Metaverse?
- Virtual Reality vs Augmented Reality?
- Infringement in the Metaverse

What is the Metaverse?

Historically:

- a term coined in a science fiction novel *Snow Crash* by American author Neal Stephenson, published in 1992

In practice:

- beyond the universe
- a space where you can interact with virtual objects in real life and with real-time information
- the convergence of physical, digital, and augmented reality
- an embodied internet where you can experience a living virtual world with a digital personality of your own to interact in an independent economy

Ok, but what IS the Metaverse?



Metaverse

According to venture capitalist Matthew Ball: Conceptually a metaverse can be said to be made up of several key characteristics:

Persistence

Interoperability

Scaling

Economy

Identity

Digital and physical

Multiple contributors

Rules of the Metaverse?

In the Metaverse, people will:

- Interact
- Transact
- Own assets
- Build service, things, and companies
- Create IP
- Advertise
- Commit crimes
- Need insurance?

WHAT RULES?

Physics/Natural Laws do not apply so ...

- no rules and endless rules could apply
- laws that govern the metaverse will be generated as the space evolves

Virtual Reality vs. Augmented Reality?

Virtual Reality:

- 3D world accessed via head mounted display (HMD)/virtual headset/glasses
- hardware tends to block the real world from view
- can be shared experience with other users
- Metaverse could be or exist within a virtual world

Augmented Reality:

- 2D or 3D world accessed via see-through HMD/virtual headset/glasses (i.e., real world is viewable while accessing 3D content)
- augmented content is overlaid onto real world objects/sky, etc.
- can be shared experience with other users
- a space where you can interact with virtual objects in real life and with real-time information

Virtual Patent Infringement in the Metaverse (Methods)

Method Claims: Recall that infringement is shown by showing that a party/machine performs each step in a given claim

If that machine is a virtual machine operating for, on, or within the Metaverse, it could arguably be held to this same standard



Method Example:

A computer-implemented method comprising:
loading video game object code into memory;
receiving player preferences;
executing the video game object code; and
displaying output from the execution of the video game object code according to the received player preferences.

Any virtual machine executing for, on, or within the metaverse and that performs these exact steps would arguably infringe this claim



Virtual Patent Infringement in the Metaverse (Apparatus)

Apparatus Claims: Infringement is shown by proving that a party used, made, offered for sale/sold, or imported a product that includes all claimed pieces of a particular apparatus/product

If that machine is a virtual version of the apparatus coded up and dropped into the Metaverse (and previously claimed by another in a system /apparatus claim), creation or sale of such an apparatus could arguably infringe



System/Apparatus Example:

A device for counting users entering a predefined location the device comprising:

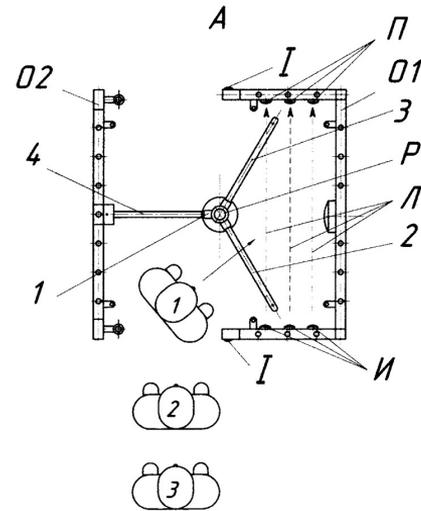
- a support leg with a bottom portion fixed to a ground plane;
- an assembly affixed to a top portion of the support leg and configured to rotate around the support leg;
- a gate affixed to the assembly such that the gate rotates with the assembly; and
- a counting mechanism that increments a count when the gate is rotated.



Virtual Patent Infringement

Consider placing the device for counting in the Metaverse:

Would the claim be infringed if written for and performed in the metaverse/virtual world against say a turnstile claim written for the real world?



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A device for counting users entering a predefined location the device comprising:

- a support leg with a bottom portion fixed to a ground plane;
- an assembly affixed to a top portion of the support leg and configured to rotate around the support leg;
- a gate affixed to the assembly such that the gate rotates with the assembly; and
- a counting mechanism that increments a count when the gate is rotated.

Virtual Patent Infringement

What about the Doctrine of Equivalents?

under the doctrine of equivalents:

"a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention."

"... where the whole substance of the invention may be copied in a different form, ***it is the duty of the courts and juries to look through the form for the substance of the invention***– for that which entitled the inventor to his patent, and which the patent was designed to secure; where that is found, there is an infringement; and it is not a defense, that it is embodied in a form not described, and in terms claimed by the patentee."

[Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 21, 29 \(1997\).](#)

[Winans v. Denmead, 56 U.S. 330, 342-43 \(1853\)](#)

Doctrine of Equivalents

Infringement by equivalence generally "requires a showing that the difference between the claimed invention and the accused product [is] insubstantial:

- one way of proving insubstantial difference is the "Function-Way-Result" test which includes ... "showing on a limitation by limitation basis that the accused product performs substantially the same function in substantially the same way with substantially the same result as each claim limitation of the patented product"
- Taking these factors out of order, the **function** (using a gate to capture entries) and **result** (recording entries) appear to be the same in both the virtual counter and the real world apparatus claim.

Crown Packaging Technology, Inc. v. Rexam Beverage Can Co., 559 F.3d 1308, 1312 (Fed. Cir. 2009).



Doctrine of Equivalents

“a claimed invention and an accused device may perform substantially the same function and may achieve the same result will not make the latter an infringement under the doctrine of equivalents where [the accused device] **performs the function and achieves the result in a substantially different way**”

Seen from a real-world angle, the virtual counter is a dramatic departure from the way the claimed apparatus works



Doctrine of Equivalents

The answer to the whether the doctrine of equivalents helps the patent holder then turns on how we view the virtual space

Are we willing to credit virtual spaces as an equivalent forum for infringement of apparatus claims?

TUNE IN TO AURORA CONSULTING'S NEXT INSTALLMENT OF THE METAVERSE TO DISCUSS POSSIBLE SOLUTIONS TO PATENT PROTECTION IN VIRTUAL WORLDS



**What questions do
you have?**