



OXIO® Health, Inc. Announces Licensing of 27th Patent

GREENACRES, FLORIDA, USA (December 3, 2021) – OXIO Health, Inc.® (“OXIO”) announced today that it has just licensed its second blockchain-related patent; this brings the total number of patents in the OXIO intellectual portfolio to 27. This new patent number, US 11,165,560 materially extends the previously issued patent on *Secure Transmission of Electronic Health Record Via Blockchain*, issued under patent number 11,121,877. This patent is materially different from the prior patent and therefore was a separate innovation from the original concept. The patent is designed to make Blockchain records systems substantially more secure and much more difficult to attack. During the preparation of this news release, we also received notice from our patent counsel that the third blockchain patent was published by the U.S. Patent and Trademark Office.

Carl L. Larsen, President and COO of OXIO Health Inc., commented on this welcome development, “The Company believes that emerging technologies like Digital Ledger Technologies (DLT), referred generally as the Blockchain in addition to the emerging *Metaverse*, have real-life applications in healthcare. We are pleased to be in the forefront of the application of these technologies to help ‘empower the patient, enable the providers, and advance the science of healthcare’^(SM). With this and other licensed patents, we believe we can bring significant advancements in the science of healthcare that will improve the quality of care and reduce the cost.”

When OXIO embarked on assembling the licensed patent portfolio, we were considering the path of technology and imagined a healthcare environment the way it should be with an array of digital tools that physicians could use to improve the quality and consistency of patient care, while simultaneously reducing the cost to deliver. This patent and the other blockchain patents are an outgrowth of the Company’s pursuit of preparing for the next evolution of the internet, referred to as Web 3.0 or *The Metaverse* that has been popularized recently by Facebook® CEO Mark Zuckerberg when he announced the renaming of Facebook to Meta.

We have begun a series of blogs on *The Metaverse* and the first of these may be viewed at [The Metaverse - Part 1](#). These blogs not only describe *The Metaverse* as an overall concept but will showcase how these the Company’s technology advances and those of others can provide benefits in healthcare. The elements of the Company’s blockchain patents are deliberately synergistic with our licensed patents for Virtual Reality, Augmented Reality, Artificial

Intelligence, Data Analytics and Predictive Medicine – all key elements in achieving our goals of re-imagining healthcare with a digital “*Technology-infused Care*^(sm).” Exhibit A below, Overview and Solution, provides further insight on this latest patent.

Mr. Larsen further commented, “Beginning with the very first licensed patent, we foresaw the state of healthcare advancing into the digital realm that provided clinicians with the tools to make clinical diagnoses to a completely new plateau, and the public to be better able to manage their own wellness. This patent and the others in the Company’s portfolio have application in each of the Company’s business units and provide material leverage to achieve substantially higher revenue per patient interaction, as well as return greater economies-of-scale throughout the organization.

We believe that our patents will spawn significant advancement in many other areas including wearable medical devices and remote patient care. We also envision that our physicians will have a clear advantage over their peers by engaging in life-like, real-time digital reality encounters with their patients using tools such as Virtual and Augmented Reality developed out of our patents, Electronic Medical Record (EMR) software and other intellectual property developed by the Company. These physicians will be able to ‘see’ what cannot be seen and without the need for patient and physician to be in the same place – we envision a new level of remote patient care.”

About OXIO Health[®], Inc.

OXIO Health, Inc. is a new, multifaceted healthcare innovations company that realized medical care and medical technology had to be merged into a new, 21st century platform, to bring more value and improve quality; much of which remains elusive in healthcare today. OXIO management brings deep, hands-on experience in working for over 30 years in nearly every segment of healthcare delivery, technology, and facilities management. Healthcare in the U.S. today is a US\$4.0 trillion industry with expectation to reach over US\$6 trillion by 2030, as 10,000 new baby boomers reach retirement age daily through this period. We have assembled the best systems in our Portfolio of Companies driven to be change agents in this industry that has resisted change for over 50 years; however, lessons learned from the COVID-19 pandemic – patients, providers and payors – we see a new receptiveness of the needed changes in the delivery of care.

Media Contact:

Carl L. Larsen, President

Carl@OXIOHealth.io

6801 Lake Worth Road, Ste. 302

Greenacres, FL 33467

+1.561.904.9477

For more information on OXIO Health, Inc. visit www.oxiohealth.io

United States of Healthcare Blogs: <https://oxiohealth.io/blog/>
Healthcare 2030 Podcasts: <https://oxiohealth.io/podcasts/>

EXHIBIT A – OVERVIEW AND SOLUTION

TECHNICAL OVERVIEW

Although Blockchain has existed for more than a decade, it has only recently gained popularity due to the increases in the transaction processing of computers that makes the heavy computational burden of most blockchain implementations possible. Blockchain, is simply the consensus of fact, truth, and ownership within a “community” which may be those that have a legitimate interest in a common record, i.e., a medical record, a bill of lading contract or other document that requires security.

For instance, a fact might be who owns which automobile or how many bitcoins are in any person’s accounts. If the ledgers kept by each person about known facts in common and all parties are in agreement, then any error in anyone’s ledger is quickly noted by the community. With each person’s ledger containing a history of all changes this universally agreed truth replaces a physical currency.

Blockchain is therefore a straightforward concept, made complex by the many variations of its intended use.

THE PROBLEM

Although blockchain systems are known to be very secure consider the following:

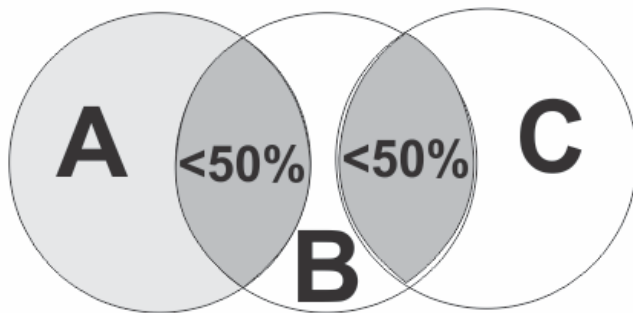
1. Blockchain has been recently defeated by what is called a 51% attack.
2. The most common form of 51% ATTACK is called **Double Spend**.
 - a) An attacker uses 51% attacks to nullify a transaction that has completed, causing the existing blockchain to be rapidly overcome with bogus data.
 - b) To do this, a massive amount of computing power is required to alter the encryption of more than 51% of the transactions, thereby forming a larger, but isolated second (redundant) chain filled with invalid data that is not broadcast to the valid blockchain. So far, only smaller bitcoin exchanges have been targeted, where fewer transactions need to be reversed for a successful exploit.
 - c) Blockchain validity is then awarded to the longest chain 51% of the total data and the attacker has won.
 - d) The attacker spends bitcoin, receives an item, perhaps more bitcoin purchased new, then reverses the transaction collecting the original bitcoin value, to be spent again on the legitimate blockchain – hence the name “**double spend**.”
3. As a blockchain exchange becomes larger, it is impractical to attack it, as modifying 51% of the records requires an unaffordable compute power.

EXHIBIT A – OVERVIEW AND SOLUTION

4. Healthcare data is not so easily exchanged, so it is a less likely target.
5. No such similar exploit has occurred on Blockchain's cousin: an IPFS network, at least not yet.

THE SOLUTION

As with many things manmade and in nature, the very strength of the blockchain is its own weakness, its sovereignty and immutability the source for the exploitation. Very simply, this



patent describes a novel process by which the attempt to exploit the immutability and modify more than 50% of a record is thwarted, by segmenting chain and ensuring mathematically that not all the blocks are accessible outside that segment portion. If less than 50% were modified in the adjacent portion, the

exploit is detected and defeated. The concept could be extended in chains or segmented portions to further limit the successful exploitation of a blockchain algorithm as well as to reduce the computational and transaction processing power needed which thereby reduces the energy consumption in running a blockchain. As blocks of data grow the complexity of a given blockchain grows geometrically in proportion to the data by a factor equal to the number of blocks and as important is the power consumption that becomes a key performance metric.

The use of this invention is not limited to protecting medical record integrity in Blockchain file systems. It works equally well for educational, judicial, historical, real property, government entitlement and taxation records. Essentially anywhere, that a malicious user might corrupt records, perpetrate fraud or commit theft is a potential candidate for this patent.