

Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

DISCLAIMER

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Editor-in-chief of White Black Legal

— The Law Journal. The Editorial Team of White Black Legal holds the

- The Law Journal. The Editorial Team of White Black Legal holds the copyright to all articles contributed to this publication. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of White Black Legal. Though all efforts are made to ensure the accuracy and correctness of the information published, White Black Legal shall not be responsible for any errors caused due to oversight or otherwise.

EDITORIAL TEAM

Raju Narayana Swamy (IAS) Indian Administrative Service officer

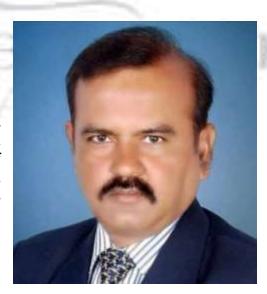


professional diploma Procurement from the World Bank.

Dr. Raju Narayana Swamy popularly known as Kerala's Anti Corruption Crusader is All India Topper of the 1991 batch of the IAS and is currently posted Principal as Secretary to the Government of Kerala . He has accolades as he hit earned many against the political-bureaucrat corruption nexus in India. Dr Swamv holds B.Tech in Computer Science and Engineering from the IIT Madras and a Cyber from Ph. D. in Law Gujarat National Law University . He also has an LLM (Pro) with specialization IPR) in well as three PG Diplomas from the National Law University, Delhi-Urban one in Environmental Management and Law, another in Law Environmental and Policy and third one in Tourism and Environmental Law. He also post-graduate holds diploma IPR from the National Law School, Bengaluru and a **Public** in

Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB, LLM degrees from Banaras Hindu University & Phd from university of Kota.He has successfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.



Senior Editor



Dr. Neha Mishra

Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi, Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.



Dr. Navtika Singh Nautival

Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.





Associate Professor at School of Law, Apex University, Jaipur, M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM

Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.

More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.



TIDRILLIA DE LA CALLACTA DEL CALLACTA DE LA CALLACTA DEL CALLACTA DE LA CALLACTA

Subhrajit Chanda

BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focussing on International Trade Law.

ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

LEGAL

META GOODS

-An analysis of the nature of products in metaverse-

(Using common law principles to determine whether Metaverse products are goods or services)

AUTHORED BY - ATHUL MOHAN

Table of statutes

- 1. GST Act, 2017
- 2. The Constitution of India, 1950
- 3. The Sale of Goods Act, 1930

Table of Cases

- 1. A.A v. Persons unknown & Ors [2019] EWHC 3556
- 2. B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03
- 3. BSNL V. Union of India 2006 AIR 1383
- 4. Colonial Bank v Whinney [1885] 30 ChD 261
- 5. Eurodynamics Systems Plc v. General Automation Limited 6th September 1988.
- 6. Liam David, unreported
- 7. National Provincial Bank V. Ainsworth [1965] AC 1175
- 8. St Albans City and District Council v. International Computers Limited [1996] 4 AII ER 481
- 9. State of Madras V. Gannon Dunkerley & Co., (Madras) Ltd 1959 SCR 379
- 10. Tata Consultancy Services Vs. State of Andhra Pradesh (2005) 1 SCC 308
- 11. Vorotyntseva [2018] EWHC 2596 (Ch)

Introduction

The world of technology has always revolved around a buzzword. "Metaverse" is undoubtedly the buzzword of this decade, or maybe this century. The origin of the word metaverse can be traced back to the last century. It was first used by Noel Stephenson in his novel "*snow crash*" published in 1992. He presented it as a utopia, to which we can escape from the dystopia in the real world. The modern technological conception of the metaverse is also somewhat similar. Etymologically the term metaverse comes from two words "meta" which means beyond and "verse" deriving from the word universe. As it is evident in the name metaverse stands for a virtual world beyond our physical universe in which people can interact with each other using their virtual avatars. This concept of this virtual world received popular attention in October 2021 when the CEO of Facebook Mark Zuckerburg renamed their parent company as Meta and allocated \$ 10 billion towards the development of the metaverse.

It is hardly surprising that the metaverse using its complex technologies will give birth to a "new space". The interactions in this new space would obviously give rise to rights and obligations among the parties engaging.⁵ These engagements cannot be effectively regulated using the traditional laws that we have. This is because of the complex and novel conduct and cross-border payments using virtual currencies.⁶ Even in this primal stage crimes have been reported in the metaverse.⁷ But the rising concern is the legal implications of the economic transactions happening in the metaverse. Contract law, sale of goods, and taxation are the fields that will face new challenges arising from this "new space". It is to be noted that even in this beginning stage, the sale via metaverse platforms has touched \$600 million.⁸ It is high time that we discuss and define the transactions in metaverse.

¹ Noel Stephenson, 'Snow Crash' (London: Penguin Press, 1992), 23.

² Ronald Leenes, 'Privacy in the Metaverse', in IFIP International Summer School on the Future of Identity in the Information Society (Boston, MA, Springer, 2007) pp. 95–112.

³ Michael Zyda, 'Let's Rename Everything 'the Metaverse!' Computer Published by the IEEE Computer Society. 55, no. 3 (2022): 124–29, < https://doi.org/10.1109/MC.2021.3130480>last accessed 21 December 2022.

⁴ Wen-xi Wang, 'A Survey of Metaverse Technology', [2022] no. 4 Chinese Journal of Engineering 44; PP. 744–56.

⁵ Safari Kasiyanto, Mustafa R. Kilinc, 'The Legal Conundrums of Metaverse' [2022] 1 Journal of Central Banking Law and Institutions 299.

⁶ Christopher J. Cifrino, "No TVirtual Property, Virtual Rights: Why Contract Law, Not Property Law, Must Be the Governing Paradigm in the Law of Virtual Worlds," (2014) 5 BCL Rev 235.

^{7 &}lt;u>C Krishnasai</u>, '21-year-old woman virtually raped, harassed in metaverse: Report' (WION, 28 May 2022) https://www.wionews.com/world/21-year-old-woman-virtually-raped-harassed-in-metaverse-report-483043 last accessed 21 December 2022.

⁸ The data was retrieved from https://nonfungible.com/market-tracker.

Products in Metaverse

There is a growing market for virtual products in metaverse. As it is just like your physical world your avatar can purchase land, apparel, and even vehicles in metaverse. All these products are in virtual form as NFTs⁹. Companies like Microsoft, Gucci, Louis Vuitton, and Hyundai have made their appearance across various metaverse platforms. The involvement of companies in metaverse is actually quite interesting.



Figure 1.¹⁰

It is quite interesting that none of these products are real. They are virtual products made using blockchain technology¹¹. This specific nature of metaverse products raises a pertinent question. Are these virtual products really goods? Or is it just a service that we receive from the developers of that particular product? This is obviously an interesting question in contract law as the nature of these transactions would largely determine the relationship between the developer band and the purchaser. We will try to define the nature of metaverse products by taking some products from Decentraland¹² (one of the leading metaverse platforms) and subjecting it to certain tests for defining their nature. Decentraland is a free platform for everyone logging in. However, to purchase products or land we should link our wallet to the account. The payment for the products is taken in the form of coins

⁹ To read more on NFTs; https://www.authorea.com/doi/full/10.22541/au.166490992.24247550.

¹⁰ Jon Radoff, 'Market Map of the Metaverse', (Medium, 2021) < Market Map of the Metaverse. In my article on the value-chain of the... | by Jon Radoff | Building the Metaverse | Medium> last accessed 21 December 2022.

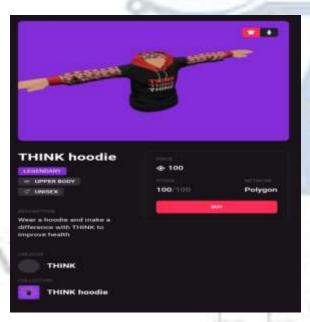
¹¹ To read more on blockchain technology; https://www.ibm.com/in-en/topics/what-is-blockchain.

¹² https://decentraland.org/

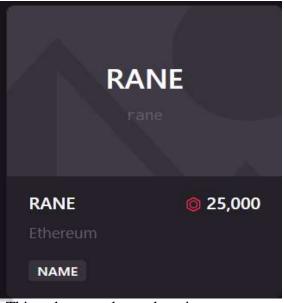
(mana) 1 mana = \$ 0.30 USD. Here we have taken two products from decentraland. Product 1 is a hoodie that almost costs \$ 30 USD (2,487 in Indian money) and product 2 is a name that you can own for \$ 7,500 USD (6,20,632 in Indian money). Since the transactions are ranging from such a small amount to lakhs, defining the nature of these transactions becomes a crucial task.

Product 1.¹⁴ **The Definition Dilemma**

Why is it so difficult to categorize metaverse products as goods? It is the perplexity revolving around metaverse products that makes this a hard



Product 2.15



task. This subsequently evolves into a contract law issue. What is the nature of contracts in metaverse? Is it a contract for sale or a contract for service? In attempting to answer this question we are going back to our old question about the very nature of these

products. In commonsensical knowledge, anyone would undoubtedly categorize them as goods. But the unique nature of these products makes it very hard for us to define them as goods by using only the statutory law which is almost a century old. However, we shall start by viewing these products through the statutory framework on goods. The basic definition of goods can be taken from The Sale of Goods Act;

¹³ Ibid.

 $^{^{14}}$ < https://market.decentraland.org/contracts/0x60e7cf89e84c9fed1fd88c13776ec97fd88cec57/items/0 > 22 December 2022.

¹⁵https://market.decentraland.org/contracts/0x2a187453064356c898cae034eaed119e1663acb8/tokens/12060661914756 327878336742964105797916296436198843458402557462985671426322016 22 December2022.

Goods under The Sale of Goods Act, 1930

"goods" means every kind of moveable property other than actionable claims and money; and includes stock and shares, growing crops, grass, and things attached to or forming part of the land which are agreed to be severed before sale or under the contract of sale.¹⁶

It is hardly surprising that these definition fails to include the products that we are discussing. But that doesn't mean that these products are not goods. This can rather be taken as an instance of incapacity of the definition. Even the GST act passed in 2017 made no notable improvement in improving the definition of goods. ¹⁷ Indian constitutions also provide a narrow definition of goods as including all materials, commodities, and articles. ¹⁸ It is clear that the statutory definitions of goods are not capable of accommodating the products in the metaverse. This was not the first instance of incapability. Legal systems across the world have grappled with the dilemma of defining intangible and virtual products ranging from electricity to Bitcoins. These case laws have laid down some principles and doctrines which will be useful to apply to our two products in the discussion.

Judicial Interpretation of Goods

As we have seen, the statutory framework is not capable of accommodating new forms of goods. Thus, judicial systems across the globe have tried to address this incapacity by trying to define the nature of certain things. Most of these cases are tax-related and have nothing to do with contracts. However, their findings could be useful in our analysis.

1. BSNL V. Union of India 19

In this case, the honorable supreme court dealt with the question of whether mobile connections are sales or services. It was eventually held that it was a service and not a good. The reasoning that they used was that electromagnetic waves are not goods as they are not in a deliverable form.20 Thus deliverability can be taken as a test for defining goods. A deliverable thing is something that can be

¹⁶ The Sale of Goods Act 1930, S. 2 (7).

¹⁷ GST Act 2017, S.2(52).

¹⁸ Constitution of India 1950, art 366 (12).

¹⁹ 2006 AIR 1383.

²⁰ Ibid [63].

provided or achieved as a result of a process.21 While we test both of our products on their deliverability it is clear that they are deliverable. These products can be achieved as a result of a particular process.

The BSNL case also makes an interesting observation about whether the prescription by the doctor or legal documents prepared by a lawyer can be considered as goods or as services provided by these professionals. This is similar to the case of metaverse products. All the products are the results of hard work by the developers. So, can it be considered as products rather than services from the developers? The supreme court held the former to be services.²² Does this mean metaverse products would also be services? we shall go to the precedent cited by the court to answer this question.

2. State of Madras V. Gannon Dunkerley & Co., (Madras) Ltd²³

In this case, the issue was whether building contracts can be conceived as contracts for the sale of all the materials by deducting the service costs. The supreme court held that building contracts were a contract for service even though they had the transfer of certain materials. The court based its decision on the rationale that the dominant element and intention of Building contracts was service and not the sale of materials. In the BSNL case, the court adopted this reasoning and applied it in defining the transactions between doctors- patients and lawyers, and clients. They called it the "dominant nature test". It was held that to determine the nature of a contract we should look into its dominant nature. Logically it is obvious that the dominant nature of transactions in metaverse is the sale of goods and the service by the developers is only a subservient act to make the sale possible. Thus, based on the dominant nature test we can categorize metaverse products as goods and their transfer as sales.

Gannon Dunkerley's case also suggested four essential elements of a sale.²⁶ They were;

- 1. Parties competent to contract
- 2. Mutual consent between parties

²¹ 'Deliverable, n' (Cambridge dictionary) < https://dictionary.cambridge.org/dictionary/english/deliverable> last accessed 22 December 2022.

²² Supra note 20; [45].

²³ 1959 SCR 379.

²⁴ ibid [27].

²⁵ Supra note 23.

²⁶ Supra note 24; [25].

- 3. An absolute or general property transferred from the seller to the buyer.
- 4. A prize in money paid or promised

In metaverse, finding whether the first element is met is a tough task due to the anonymity of users and a large number of bots and fake accounts. However, we shall not go deeply in to in that as it is more of an ITA issue. The second is of course met in metaverse as all the transactions happen through smart contracts which ensure mutual consent of parties. Thirdly there is a visible transfer of a property in our case the jacket is transferred from the developer's account to the purchaser's account. This transfer is also digitally traceable. Finally, as we have noted above all these products are bought paying a consideration. But is it paid in money? does the payment mode has any implication on the nature of the transaction? we will go into this question later. However, metaverse products are goods when analyze through the Gannon test.

3. Tata Consultancy Services Vs. State of Andhra Pradesh²⁷

In this case, the court dealt with the question of whether software can be considered a good or service. Products in metaverse and software have a striking similarity as both of them are a result of coding done by professionals. Thus, this decision about the nature of software would ease our analysis. But we will go through that analysis later. This judgment becomes relevant as it suggested the three desirable attributes of a good;

- 1. Utility
- 2. Capable of being bought and sold;
- 3. Capable of being transmitted, transferred, delivered, stored, and possessed

Metaverse goods are easily tradeable and it is also possible to store them in your personal account. The question of possession will be dealt with later. What seems interesting is the question of utility. What is the utility of our products? Product 1 is at least wearable by our character. In fact, what utility does our product 2 offer for such a huge price? To answer it we may try defining utility. According to Jeremy Bentham, "Utility is meant that property in any object, whereby it tends to produce benefit, advantage, pleasure, good, or happiness- (all this in the present case comes to the same thing) or

²⁷ (2005) 1 SCC 308.

(what comes again to the same thing) to prevent the happening of mischief, pain, evil, or unhappiness to the party whose interest is considered". ²⁸

Going with this definition one can easily argue that the products in metaverse have the utility of happiness from entertainment. But does that have any benefit in material terms? What benefit can one achieve by purchasing a name for more than 6 lakhs? Even though it seems that there is no benefit, there are material benefits for these products. Most of the products like product 2 are bought as a form of investment. People try to purchase popular names and sell them later for a profit. Thus, we can say that products like product 2 are similar to a share in the case of utility.

4. Ainsworth Test 29

Ainsworth test also provides four features for goods;

- 1. Definable.
- 2. Identifiable.
- 3. Capable in its nature of assumption by third parties.
- 4. Some degree of permanence or stability.

The first two features are met, especially if we look at our product 2, it is so unique, and this uniqueness makes it valuable. The question of capability is almost similar to the question of utility that we dealt with. Thus, the only feature that stands out is that of permanence and stability. We shall take it up at the end with all other questions we have left open.

From software to Bitcoin

Our analysis until now was purely a hypothetical application of case law principles on metaverse products. There is no way to confirm that this analysis is accurate. However, the best that we can do is to look at how courts have analyzed products like software and bitcoin. One such case was discussed earlier- *Tata Consultancy Services* Vs. *State of Andhra Pradesh* in which the court held that it is unable to accept the contention that software would not be a good because it involves intellectual activity.³⁰ Metaverse products can also be viewed similarly. Only because it is an

_

²⁸ Jeremy Bentham, 'An Introduction to the Principles of Morals and Legislation'. (1823, London: Pickering).

²⁹ National Provincial Bank V. Ainsworth [1965] AC 1175.

³⁰ Supra note 27; [39].

intellectual creation it doesn't cease to be a good. This approach of looking at software is held by many other courts.³¹ Most of these cases actually held software as good as it had a physical component like a cd, hard disk, or floppy. But now the purchase of software is completely online, just like our metaverse products. Will the reasoning and liability change in that case? Scholars argue that this online transaction shouldn't affect liability. They argue that liability shouldn't in principle depend upon the carrier medium.³² Thus we can say that even completely online products like in metaverse can be considered as goods.

The case of bitcoin is also relevant as both bitcoin and metaverse products follow the same technology of blockchain. In *A.A v. Persons unknown & Ors.*³³ The court held that bitcoin can be considered a property.³⁴ The nature of bitcoin as property was recognized in earlier cases also.³⁵ In A. A case Justice Bryan pointed out a major issue;

"Prima facie there is a difficulty in treating Bitcoins and other crypto currencies as a form of property: they are neither chose in possession nor are they chose in action. They are not choses in possession because they are virtual, they are not tangible, they cannot be possessed. They are not choses in action because they do not embody any right capable of being enforced by action." ³⁶, ³⁷.

He cited *Colonial Bank v Whinney*³⁸ which held that; "All personal things are either in possession or action". The law knows no tertium quid between the two." isn't this standard also applicable to the products in metaverse? Thus, we come back to the question that we left in Tata consultancy test. Are we really possessing them? Justice Bryan clears this confusion by stating that we shouldn't be limited to the interpretation given by *Colonial Bank*. He held that "crypto asset might not be a thing in action on the narrower definition of that term does not in itself mean that it cannot be treated as property".³⁹

³¹ St Albans City and District Council v. International Computers Limited [1996] 4 AII ER 481; Eurodynamics Systems *Plc v. General Automation Limited* 6th September 1988.

³⁵ B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03, Vorotyntsea [2018] EWHC 2596 (Ch) and Liam David, unreported.

³² P.S Atiyah, John M Adams, Hector Macqueen, 'The Sale of Goods' (10th edition, Taxmann India 2001); p.69.

³³ [2019] EWHC 3556.

³⁴ ibid [59].

³⁶ Supra note 33; [55].

³⁷ Warsamlac, 'Assignment in Choses of Action', (Law King, 20 October 2020). https://warsamalc.com/assignment-of-choses-in-action/; As a rule, choses in action are your rights that you must claim. They are not in your actual possession to benefit from them, rather you may lose. To simplify, your money in your hand is a chose in possession, whereas your money in the bank is a chose in action wherein you need an action to possess.

³⁸ [1885] 30 ChD 261.

³⁹ Supra note 33; [84].

Through this judgment, a third category of property was created. But rather than suggesting a way in which such products can be possessed it ignored the question of possession. Thus, possession of such goods still remains a grey area.

Unanswered questions

we discussed earlier the implication of the mode of payment in the nature of transactions in metaverse. As we know payment is done using crypto assets, which is held as property. So clearly the fourth element in Gannon's test (payment in money is not met). One could also argue that this makes the transactions in metaverse an exchange and not sale. This also seems to be a grey area.

The question of permanence and stability also seems complicated. Metaverse will be prone to cyber-attacks. ⁴⁰ The question is whether the platform would ensure stability and permanence in this context. Decentral in its T&C has clearly denied any sort of warranty from its side. ⁴¹ So the issue of stability also remains unanswered.

Conclusion

In our analysis, we have used multiple tests on metaverse products. Based on the reasoning of courts in past cases we have tried to create a reasonable interpretation of the nature of these goods. It would be wrong to say that our analysis based on these tests is accurate and final. Courts may take a different stand in the same tests in future. Still, the attitude of courts in dealing with virtual property tends to go in a route similar to ours. Thus, we can't authoritatively say that metaverse products are goods. All we can do is to point to the high possibility of it being considered as goods and their transactions being sale of goods.

This possibility also has some grey areas that we have discussed. The question of possession is yet to be answered. Regarding the stability issue, there should be legislation imposing liability on the platforms. Otherwise, there is no meaning in considering them as goods. We can hope that the Digital India Act (under drafting) would address some of these issues.⁴² The scope of metaverse transactions

⁴⁰ Oxford Analytica, 'Metaverse Adoption Will Multiply Cybersecurity Risks' (2022).

⁴¹ Decentraland T&C, Clause 5.1 < https://decentraland.org/terms/ >

⁴² Chetan Thathoo, 'Digital India Act: Govt Plans Category-Wise Regulations for Online Intermediaries' (INC 42, 10

is beyond imagination. The infinite scope also denotes infinite complications. Dealing with these complications would require great improvements in our legal jurisprudence. It is a goal that can only be achieved in long run.

BIBLIOGRAPHY

Books

- 1. Stephenson N, 'Snow Crash' (London: Penguin Press, 1992)
- 2. Bentham J, 'An Introduction to the Principles of Morals and Legislation'. (1823, London: Pickering)
- 3. Atiyah P.S, Adams M J, Macqueen H, 'The Sale of Goods' (10th edition, Taxmann India 2001)

Journals

- 1. Cifrino C J, "No TVirtual Property, Virtual Rights: Why Contract Law, Not Property Law, Must Be the Governing Paradigm in the Law of Virtual Worlds," (2014) 5 BCL Rev 235
- 2. Kasiyanto S, Kilinc M, 'The Legal Conundrums of Metaverse' [2022] 1 Journal of Central Banking Law and Institutions 299
- 3. Leenes R, 'Privacy in the Metaverse', in IFIP International Summer School on the Future of Identity in the Information Society (Boston, MA, Springer, 2007)
- 4. Oxford Analytica, 'Metaverse Adoption Will Multiply Cybersecurity Risks' (2022)
- 5. Wang W, 'A Survey of Metaverse Technology', [2022] no. 4 Chinese Journal of Engineering 44
- 6. Zyda M, 'Let's Rename Everything 'the Metaverse!' Computer Published by the IEEE Computer Society 55, no. 3 (2022)

December 2022) < https://inc42.com/buzz/digital-india-act-govt-plans-category-wise-regulations-for-online > last accessed 24 December 2022.

Websites

- 1. https://decentraland.org/
- 2. https://dictionary.cambridge.org/dictionary/english/deliverable
- 3. https://nonfungible.com/market-tracker
- 4. https://warsamalc.com/assignment-of-choses-in-action/
- 5. https://www.authorea.com/doi/full/10.22541/au.166490992.24247550
- 6. https://www.ibm.com/in-en/topics/what-is-blockchain
- 7. Market Map of the Metaverse. In my article on the value-chain of the... | by Jon Radoff | Building the Metaverse | Medium

News Articles

- 1. <u>Krishnasai C</u>, '21-year-old woman virtually raped, harassed in metaverse: Report' (WION, 28 May 2022)
- 2. Thathoo C, 'Digital India Act: Govt Plans Category-Wise Regulations for Online Intermediaries' (INC 42, 10 December 2022)

