

On behalf of the Claimant
Witness: M C Hearn
Exhibits MCH-1 – MCH-5
10 November 2023

Claim No: IL-2021-000019

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND & WALES
INTELLECTUAL PROPERTY LIST (ChD)

B E T W E E N

CRYPTO OPEN PATENT ALLIANCE
(for itself and as Representative Claimant on behalf of
Square, Inc., Payward Ventures, Inc. (DBA Kraken),
Microstrategy, Inc., and Coinbase, Inc.)

Claimant

-and-

DR CRAIG STEVEN WRIGHT

Defendant

WITNESS STATEMENT OF
MICHAEL CHRISTOPHER HEARN

I, **MICHAEL CHRISTOPHER HEARN**, of [REDACTED], will say as follows:

1. I am a software developer and run my own company that I also founded, Hydraulic Software. The company makes tools to simplify the deployment of desktop apps. As of 15 November 2023, I will be taking up a new role with Oracle as a software architect.
2. I worked on Bitcoin in the early days and as part of that I interacted with Satoshi Nakamoto, only ever by email, and we effectively worked together on the project for a brief period of time until he retreated from the project and told me he was done with it.
3. This written statement has been prepared by Bird & Bird following two video interviews. The evidence given in this statement is written in my own words as far as practicable. I am told by Bird & Bird that my exchanges with them are subject to privilege, and nothing I say in this statement is intended to waive any such privilege. The facts and matters set out in this statement are within my own knowledge unless otherwise stated. Where I refer to facts within my own

knowledge, I believe them to be true. Where I refer to information from other sources, those facts and matters are true to the best of my knowledge and belief and I have identified my sources.

4. During my interviews with Bird & Bird I performed some searches of my email inbox for “Craig Wright”, “craig@rcjbr.org” and “craig.wright@hotwirepe.com”, and discovered some emails exchanged with Dr Wright in 2014 and 2016 that have been exhibited to this statement and are described below.
5. Bird & Bird has pointed out the declaration at the bottom of this statement to me and asked me in particular to bear in mind that on points that I understand to be important in the case, I have stated honestly (a) how well I recall matters and (b) whether my memory has been refreshed by considering documents, and if so how and when.
6. Although I do not know all the issues and have not been following the news on this case, I have been aware for some time that Craig Wright claims to be Satoshi Nakamoto.

My Career and Work on Bitcoin

7. I started doing software development when I was 16, including for Qinetiq (a defence contractor in the UK), Google, and Andreessen Horowitz (a US venture capital firm). I worked on a number of projects relating to Bitcoin between 2009 – 2015, including developing Lighthouse: the idea of this was that it was an app which was a sort of Bitcoin-style Kickstarter (crowd-funding site), built using the smart contract features of the Bitcoin protocol. And my plan was to use it to raise funds to work on Bitcoin and projects for the advancement of Bitcoin.
8. At the end of 2015, I left the Bitcoin community and joined R3 as a developer, and developed their Corda product which went on to be the most successful enterprise blockchain platform out there. I then founded my own small business, Hydraulic Software. I spent a couple of years doing that, and have just accepted a position at Oracle, which I will be starting on 15th November 2023.

Contact with Satoshi Nakamoto

9. I found out about Bitcoin in April 2009 from a mailing list I subscribed to, which was for the discussion of a system called Ripple (which is not the same as the company that is currently called Ripple). And I was on that mailing list because I was interested in internet money for a long time before that, going back to my teenage years.

10. I checked and the mailing list is called rippleusers@googlegroups.com, which is public. The exact thread is here: <https://groups.google.com/g/rippleusers/c/1GsQzGv9Y14/m/6AkkPzOwq88J>, a screenshot of which is shown at Exhibit MCH-1. I commented on this thread, discussing the security of the system (page 9 of Exhibit MCH-1).

11. I contacted Satoshi in April 2009 after I found out about Bitcoin, because I had questions; there was a lot about Bitcoin that wasn't clear from the White Paper or the user interface of the app or the website (back then it was <https://bitcoin.sf.net>). I thought about what he was proposing and I had a lot of questions about how it would work out in the future, I was interested in the question of whether this could genuinely become a global payment system and a global currency.

12. My communications with Satoshi spanned the period between 12 April 2009 – 23 April 2011. I have posted almost all of my emails with Satoshi on my website, which is publicly accessible at <https://plan99.net/~mike/index.html> (divided into 5 separate email threads). Screenshots of these emails are shown at Exhibit MCH-2. I have shared the emails with people over the years and they were published by a third party first on <https://bitcointalk.org/index.php?topic=2080206.0> on 7 August 2017, before I published them on my website.

Comments on Dr Wright's Evidence

13. Bird & Bird sent me extracts of Dr Wright's evidence in the above proceedings in which sentences containing mentions of my name are highlighted in grey, and asked me to provide my comments on these extracts, copied below. I understand these are taken from the First Witness Statement of Craig Steven Wright dated 28 July 2023.

“104. I envisaged Bitcoin evolving into a commercial system with the underlying infrastructure ultimately hosted in data centres and administered by corporations. It was not about every individual running a node but about a more efficient and decentralised model of financial transactions. The misinterpretation and distortion of the concept of 'decentralisation' became a recurrent source of frustration for me.

105. Among those who did engage with the concept, Hal Finney was notably supportive. He had been an influential figure in developing cryptography and security. It's worth noting that our communications occurred exclusively under the Satoshi Nakamoto pseudonym; he only knew me as Satoshi. While our exchanges were not extensive, his contributions were quite beneficial. He expressed his interest through an email and later assisted with certain aspects of the code, as I will elaborate on later. A software developer, Mike Hearn, also shared his thoughts and feedback on the project. These early adopters played a crucial role in the nascent stages of Bitcoin, providing invaluable insights and contributions.

121. In the early days of Bitcoin (around 2009 to 2010), my actions were primarily driven by the desire to initiate use and adoption of the technology, not by a pursuit of financial gain. For example, on 12 January 2009, the inaugural Bitcoin transaction occurred when I transferred Bitcoin from Block 9 to Hal Finney. This was not meant as an economic exchange because Bitcoin held no tangible value at the time; it was a practical demonstration of the system in action. Hal and I had been in continuous dialogue since around October 2008, predominantly through email, and he was actively exploring the system. Moreover, my transfers of Bitcoin to other key figures in the early Bitcoin community like Mike Hearn, and Gavin Andresen were freely done, without any associated cost. My transactions with the Russian "WebMoney" exchange in 2011 were also undertaken with the goal of encouraging utilization of Bitcoin rather than personal monetary benefit. These actions were taken to foster the usage and understanding of Bitcoin."

14. I understand these are the only mentions of me in Dr Wright's evidence. Those events have all been documented by me publicly. I quoted excerpts of my emails with Satoshi in my own emails during debates, I sent them to a couple of third parties who said they were building collections of Satoshi's emails, and I published the emails on my website.

Previous Contact with Dr Wright

15. In addition to the interactions discussed in Dr Wright's evidence, I also had further interactions with Dr Wright in 2014 and 2016.

16. During my video interviews with Bird & Bird, they asked if I had any other emails with Craig Wright and I searched my email inbox during the interview for "Craig Wright" and also the email addresses he used to contact me (craig@rcjbr.org and craig.wright@hotwirepe.com).

17. I found that I had exchanged emails with Dr Wright in 2014 and 2016. I was already aware of the 2016 emails because in 2016, I had dinner with Dr Wright and others in London, discussed below. I had forgotten about the 2014 emails and only found them again as a result of my inbox search.

1. Email received from Dr Wright in 2014

18. On 7 July 2014 I received an email from Dr Wright with the Subject Line "Control by rich people)"[sic] from craig.wright@hotwirepe.com. This email, together with the full chain of responses is shown at Exhibit MCH-3.

19. I paraphrase the email thread: the first email from Dr Wright asks if I was willing to work on Bitcoin full time, focus on certain areas, enter into a 5 year agreement, effectively asking 'can I fund you'. I responded later that day to say that he could, and that I was working on this thing (Lighthouse, mentioned above) specifically so

{D/506}

that people can fund Bitcoin development and sent him a link to it. Dr Wright responded that he was aware of this. I then said that we can set up a fund with whatever amount of direction he desired because at the time I was like if people want to fund this, I don't particularly mind what people funded. This was a somewhat common query at the time so I said OK, I am going to set something like that up in the future where you can just take part.

20. At the time there was just a lot of interest and funding flowing into Bitcoin and a common question was 'how do we support the core system?' (Dr Wright refers to "there are a few things in the core that need developing" in his first email). There was a lot of money going into peripheral projects and new companies and so on, but the actual software itself wasn't being funded that much. At the time, I did not think this was an unusual query and I didn't hear anything back from him after my last response (page 2 at Exhibit MCH-3).

{D/506/2}

21. I do not recall having any contact with Dr Wright between these emails in 2014 and the dinner in 2016, discussed below.

2. Dinner with Dr Wright in 2016

22. On Saturday 9 July 2016, I had dinner in London with Dr Wright, his wife (that is how she introduced herself), Jon Matonis and someone from one of Dr Wright's companies whose name I had forgotten (he was a big guy, I remember that). I refreshed my memory by looking at our email exchanges about the dinner, shown at Exhibits MCH-4 and MCH-5 and reminded myself that (i) the person from Dr Wright's company was called Stefan Matthews, and (ii) Dr Wright made a booking for 6.30pm that day at Wild Honey, 12 St George Street, London, W1S 2FB. The restaurant is now marked as "Permanently Closed" on Google.

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23. Bird & Bird asked me how this dinner came about. Jon Matonis was at a conference in London where I was speaking, and he came up to me and said along the lines of "Oh it's great you're in town, Craig Wright is too and he'd like to meet you". On re-reading the emails about the dinner it looks like it was Jon who wanted me to meet Craig Wright (rather than the other way round), so it might have been that Jon wanted me to meet Dr Wright to get my impression of him. I think by this point I'd heard the name Craig Wright and knew that he claimed to be Satoshi Nakamoto. I did not have any particular opinion of him one way or another at that point, and so I said "OK, Jon, sure, let's get dinner". It was either that or I would be eating by myself that night so I thought why not.

24. Bird & Bird asked me what I thought the purpose of this dinner and meeting Dr Wright was. I think that Jon wanted me to tell him that this guy was Satoshi

Nakamoto – by the end of the dinner I was sure that was what Jon wanted as he asked me specifically. Jon certainly seemed convinced that he was Satoshi and wanted me to go along and meet Dr Wright to, I don't know, reinforce that belief I guess.

- 25.** At the dinner we discussed a wide range of topics, it was a fairly long meal. Dr Wright was claiming to be Satoshi so I tried at one or two points to ask him things that I had always wanted to know the answer to in relation to Bitcoin and the actual implementation and specifically, details that weren't in the White Paper that only Satoshi would know. That was mostly fruitless. Completely fruitless I should say. He failed all of my check questions. And we made loads of small talk. He told me a bit about his businesses, but I don't really remember the details. I remember he said he was filing a lot of patents on things and one reason I didn't get any information out of him was he'd start to struggle a bit with an answer and Stefan would be like 'oh you can't answer that as if you talk about that that would interfere with our patent filing'. So I remember that. But otherwise, it was mostly small talk.
- 26.** Bird & Bird asked me if I could recall any of the specific technical questions that I asked Dr Wright at this dinner. I remember that one of them was what the SIGHASH_SINGLE mode is for in the signing protocol. When you sign a transaction in Bitcoin by default you sign all of it so nothing about that transaction can be changed after the signature. SIGHASH_SINGLE (and there's a few other SIGHASH modes) allow you to sign only parts of the transaction, which means that you're like saying the parts you don't sign can be set to anything after the fact. So, you're effectively signing not quite a blank cheque but a cheque with parts allowed and parts not allowed. And some of those SIGHASH modes I found uses for, and Satoshi outlined some uses in his emails, but this specific mode I could not work out. It was easy to work out what it did, but why it was there and what it was intended for was much harder to work out. So I asked him about that and that was one of the answers where he struggled (I got the impression he didn't really know), and then Stefan told him he couldn't answer. I cannot recall exactly what Dr Wright said in response, but he was cut off very quickly by Stefan.
- 27.** Bird & Bird asked me whether Dr Wright gave any accurate answers. Some of Dr Wright's answers were in the general area, but garbled. I didn't get the sense he knew what he was talking about. The clarity of thought present in the emails from Satoshi, the White Paper and the Bitcoin project as a whole was not present when talking to Dr Wright, because of the content of his answers (rather than the form).
- 28.** Bird & Bird asked me what my impressions of Dr Wright were at this dinner. My impressions of Dr Wright were poor, I got the sense he was routinely talking about

things he didn't deeply understand. I think there were additional technical questions I asked, I can't remember the exact details, but I remember feeling like the answers I got back were only slightly better than Star Trek-style technobabble in some cases. I was like, I don't get the sense at all that this guy designed the thing (Bitcoin) otherwise he'd be able to give a much more clear discussion of them.

29. There were points during the small talk as well where Dr Wright said things that made me do a double take, and I remember being rather surprised that the other people around the table didn't appear to also be having doubts about some of the things he was saying. I don't remember exactly what triggered that response in me, but I definitely remember wondering 'why you don't see through this'? For me it seemed like he would just say whatever popped into his head and did not come across as a particularly credible character. Which I told Jon afterwards.
30. Bird & Bird asked me about my impressions of the others at the dinner. I already knew Jon a bit so my impression of him did not change. I am not friends with Jon but I have bumped into him at conferences and other events. Dr Wright's wife seemed pleasant enough. Stefan Matthews was a bit of an enigma, he didn't talk very much except to shut up Craig when he started struggling, well my perception was to give him an excuse to stop talking when he was about to dig himself a hole. He acted as a kind of monitor for the conversation and would occasionally tell Dr Wright to stop talking about things. That struck me as a little odd because supposedly Wright was the big man, but he appeared to be almost under the thumb of this other guy, and I don't quite understand why.
31. After the dinner, we all just walked back to wherever we were staying. Jon was there and the others were not (I think they had left already by that point), and he asked along the lines of "I think this guy is Satoshi, I want to know what you think, what did you make of him", and I responded along the lines of "I didn't get the impression I was talking to Satoshi to be honest". I don't think we discussed it much further than that.
32. I do not recall having any interactions with Dr Wright or Stefan Matthews after that dinner.

Declaration of Michael Christopher Hearn

I understand that the purpose of this witness statement is to set out matters of fact of which I have personal knowledge. I understand that it is not my function to argue the case, either generally or on particular points, or to take the court through the documents in the case.

This witness statement sets out only my personal knowledge and recollection, in my own words.

On points that I understand to be important in the case, I have stated honestly (a) how well I recall matters and (b) whether my memory has been refreshed by considering documents, if so how and when.

I have not been asked or encouraged by anyone to include in this statement anything that is not my own account, to the best of my ability and recollection, of events I witnessed or matters of which I have personal knowledge. I believe the facts stated in this statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

Signed by Michael Christopher Hearn:

A handwritten signature in black ink, appearing to read 'M Hearn', written in a cursive style.

Date: 10th November 2023