IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation: *Skycope Technologies Inc. v. Jia,*
              2023 BCSC 1288

Between:

Skycope Technologies Inc.

Plaintiff

And

Junfeng Jia, also known as Jack Jia, Leyuan Pan, also known as Michael Pan, Kunyu Zhang, also known as Eric Zhang, Qianqi Zhuang, also known as Tim Zhuang and Bluevec Technologies Inc.

Defendants

- and -

Between:

Skycope Technologies Inc.

Plaintiff

And

Xiaoqian Wu, also known as Karl Wu and Jiawei Li

Defendants

Before: The Honourable Justice Iyer

Reasons for Judgment

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Place and Date of Trial: Vancouver, B.C.
                                               August 23-26, 30-31, 2021
                                                   September 2-3, 2021
                                                      October 15, 2021
                                                      February 2, 2023

Place and Date of Judgment: Vancouver, B.C.
                                                          July 27, 2023

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OVERVIEW

[1]   This dispute arises out of the breakdown of the friendship between Zhenhua "Eric" Liu, the principal of the plaintiff Skycope Technologies Inc. ("Skycope") and Junfeng "Jack" Jia, the principal of the defendant, Bluvec Technologies Inc. ("Bluvec). Their dispute has spawned the present litigation[1] in British Columbia, as well as legal proceedings in other jurisdictions. What was a close friendship has turned into deep animosity, with each side seemingly committed to driving the other out of business. Their enmity was evident at the trial.

[2]   Mr. Liu and Mr. Jia met in 2007 when they were working for the same cybersecurity company in China. Both subsequently transferred to the company's Vancouver office and their friendship continued.

[3]   In 2016, Mr. Liu left paid employment in order to work on developing "anti drone" wireless technology. Such technology enables users to detect and block or "jam" unwanted drones, and has numerous practical applications. Mr. Jia and some other friends helped him. In the same year, Mr. Liu incorporated Skycope to develop this technology ("Skycope Technology"). Mr. Liu also incorporated Shenzhen Shengkong Technologies Co. Ltd. ("Shengkong") in China to market the Skycope Technology to Chinese investors[2].

[4]   Mr. Jia left paid employment to join Skycope. Skycope hired the other individual defendants in 2016 and 2017. Their employment contracts impose confidentiality, non-solicitation and non-competition obligations.

[5]   On December 13, 2017, Mr. Liu terminated Mr. Jia's employment at Skycope without notice. This was a shock to Mr. Jia.

[6]   About three months later, Bluvec was incorporated to develop wireless security products, the foremost of which was wireless anti-drone technology. Over

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[1] There are two proceedings, S-189114 and S-196122, but they were consolidated and heard together.
[2] On August 1, 2018, Ztanet, a company with a registered address in Vancouver, acquired Skycope from Shengkong. Mr. Liu is a shareholder of Ztanet.

the following months, the other individual defendants left Skycope and began to work for Bluvec. Mr. Jia became the sole shareholder of Bluvec in October 2018.

[7]   In October 2018, Skycope obtained an interlocutory injunction against Mr. Jia, Mr. Pan, Mr. Zhang, Mr. Zhuang and Bluvec. It prohibited them from contacting or soliciting any employee of Skycope and from developing, marketing or manufacturing anti-drone technology until December 14, 2018. It also prohibited them from using or developing any anti-drone source code based on or derived from software based on Skycope's source code ("Skycope Code") until trial: *SkyCope Technologies Inc. v. Jia*, 2018 BCSC 2204 at para. 39.

[8]   Skycope's central claim is that the defendants took the Skycope Technology, which it had developed in confidence, and used it to compete against Skycope. Skycope pleads breach of common law and contractual duties of confidence against all defendants, breach of fiduciary duty by Mr. Jia, misappropriation of confidential property by Mr. Pan, and wrongful receipt of confidential information by Bluvec.[3]

[9]   The defendants deny all of these allegations. They say that very little, if any, of the Skycope Technology was confidential and that they developed Bluvec's wireless anti-drone technology ("Bluvec Technology") independently.

[10]   Skycope also claims that all of the individual defendants breached the non-competition and non-solicitation provisions of their Skycope employment contracts. The defendants challenge the enforceability of Mr. Jia's contract with Skycope and the enforceability of the non-competition and non-solicitation clauses of the other defendants' employment contracts.

[11]   Mr. Jia counterclaims against Skycope and Skycope denies liability. The counterclaim requires me to determine whether Mr. Jia was wrongfully dismissed, whether the money he contributed to Skycope is a loan that it must repay, whether he is entitled to payment for unpaid work and/or overtime, and whether he has a 30% ownership interest in Skycope. All of these claims arise from an interpretation

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[3] After trial, Skycope confirmed that it has abandoned its unjust enrichment claim.

of the contract between Mr. Jia and Skycope. The terms and enforceability of this contract are disputed.

[12]   The parties also dispute the remedies to which they are entitled if either is successful in any of their claims.

[13]   There is little disagreement about the legal principles governing each of the claims and counterclaims. The very contentious issues in this case arise from the evidence, including credibility and reliability of witnesses, whether adverse inferences should be drawn about witnesses who were not called, and the assessment of the expert evidence.

[14]   I have organized these Reasons as follows. First, I will set out a chronology of events. Second, I will assess the credibility and reliability of the key witnesses. Third, I will determine the nature and enforceability of Mr. Jia's employment contract with Skycope. Fourth, I will analyse Skycope's confidentiality claims. Fifth, I will address the enforceability of the contractual non-competition clause. Sixth, I will determine the liability of each defendant. Seventh, I will address Mr. Jia's counterclaims against Skycope. Finally, I will determine what remedies flow from my findings on liability.

CHRONOLOGY

[15]   The purposes of this section are to provide context for my factual findings and legal conclusions, and to indicate the main evidentiary disputes.

[16]   Mr. Liu and Mr. Jia met in 2007 or 2008 when both were working in the Beijing office of Fortinet, a large cybersecurity company. Mr. Liu was a security researcher and Mr. Jia was a software developer. Mr. Liu transferred to Vancouver's Fortinet office around 2010 and Mr. Jia transferred there a couple of years later. They became good friends, both at and outside of work. Although Mr. Liu left Fortinet to work for another tech company in 2014, the two remained close.

[17]   Mr. Liu was interested in creating a tech start-up company. One possibility he considered was in the relatively undeveloped field of wireless drone defence or "anti-

drone" technology. Such technology enables a user to detect wireless signals emitted by drones within a specified area and to block or disable unwanted drones. Among other things, wireless anti-drone technology can safeguard air traffic lanes, prevent drones from carrying contraband into prisons, and protect individual privacy.

[18]   In early 2016, Mr. Liu left paid employment to work full-time on developing anti-drone technology. At the time, most drone defence systems were unable to isolate the wireless signal of a particular drone and its controller from other wireless signals (such as cellphones and WiFi).

[19]   Mr. Liu found an article on the internet written by a drone hobbyist who described how he was able to detect the signal of a popular drone model, the DJI Phantom 3. Starting in June 2016, Mr. Liu and some of his friends, including Mr. Jia, worked on developing a proof of concept and prototype for decoding a DJI Phantom 3 drone using wireless radio frequency technology. Once a drone's signal is decoded, it becomes possible to block or jam it and/or take control of it. Proof of concept and a prototype would demonstrate that the technology was viable and could be used to attract investors.

[20]   There is conflicting evidence about the extent and nature of the work Mr. Jia did at this stage.

[21]   The prototype was completed by early August 2016. The group identified China and North America as the best markets for the technology. Mr. Liu incorporated Skycope that month, as the company through which the wireless anti-drone technology would be developed. He incorporated Shengkong around the same time, as a vehicle to attract Chinese investors.

[22]   Mr. Liu and Mr. Jia contemplated that Mr. Jia would leave his paid employment at Fortinet to join Mr. Liu at Skycope. They discussed the terms on which he would do so, including salary, job title and equity interests, for some time. What they discussed and agreed upon is contested. They also disagree about how to characterize the approximately $10,000 that Mr. Jia contributed to Skycope.

[23]   In October 2016, Mr. Jia left his job and joined Skycope as its Chief Technology Officer with overall responsibility for development of the Skycope Technology. Mr. Jia signed a written employment contract with Skycope. The circumstances surrounding the signing of the contract, its terms and its validity are all disputed.

[24]   From late 2016 through 2017, Skycope hired the other individual defendants. All of them signed employment contracts with Skycope that imposed confidentiality obligations and contained non-competition and non-solicitation clauses.

[25]   During this period, Mr. Liu spent most of his time in China attracting investors. Mr. Jia was responsible for development of the Skycope Technology and he led the technical team that included the other defendants. Their work focused on writing the Skycope Code and finding and refining the hardware components.

[26]   The individual defendant, Dr. Leyuan Pan, started working informally with Skycope as a wireless signal researcher and developer as early as December 2016. At that time Dr. Pan was in a doctoral program at the University of Victoria and did not have a valid work permit. Upon completion of his PhD, he formally commenced working at Skycope on May 8, 2017.

[27]   Dr. Hamid Boostanimehr started working as Skycope's lead wireless engineer on March 2017. He was a key witness for Skycope.

[28]   The individual defendant Qianqi "Tim" Zhuang started working as a hardware manager for Skycope on May 10, 2017.

[29]   The individual defendant Xiaoqian "Karl" Wu started working for Skycope as a software engineer on June 5, 2017.

[30]   The individual defendant Kunyu "Eric" Zhang started working for Skycope on September 4, 2017. His job was quality assurance: to test Skycope's software on its hardware and report results to the engineers. Initially, he was hired as a co-op

student. When he completed his university studies, he was hired in a permanent position as a hardware engineer on January 5, 2018.

[31]   The individual defendant Jiawei Li also joined Skycope as a co-op student in September 1, 2017 to perform the same quality assurance role as Mr. Zhang.

[32]   Mr. Jia and the technical team, including the individual defendants, worked on further developing the prototype. That involved three types of work: 1) analyzing and decoding the signals (or languages) used by different types of drone models; 2) creating the source code that tells the Skycope Technology how to detect, isolate, decode and disable particular wireless drone signals; and 3) testing and experimenting to ensure that the Skycope Code successfully operates the Skycope Technology.

[33]   Those working on development of the Skycope Code used a version control system called GitHub to track who made what changes to the Skycope Code on what date, to allow creation of different versions of the Skycope Code for experimental purposes, to identify and correct errors, and to allow different developers to work on the Skycope Code at the same time.

[34]   There is a great deal of conflicting evidence about the development and uniqueness of the Skycope Code as it is central to Skycope's breach of confidentiality claims. One issue is whether and to what extent Skycope was developing the capacity for the Skycope Technology to identify the location of a drone and what direction it came from. This is called direction-finding functionality.

[35]   In November 2017, Skycope considered applying for patents for aspects of the Skycope Technology in China through Shengkong. Dr. Pan took the lead on this and drafted the technical components of patent applications for Skycope's broad band (radio frequency) detection algorithm and for its intelligent jamming technology. These were submitted to the Chinese patent office in mid-March 2018.

[36]   By the end of December 2017, the Skycope Technology could detect, classify and identify up to ten different drone models, defend against some of them, and distinguish friendly from unfriendly drones.

[37]   On December 13, 2017, Mr. Liu terminated Mr. Jia's employment. Mr. Jia says this came as a complete surprise to him. Mr. Liu testified that the termination was the result of a number of ongoing concerns. He gave Mr. Jia a letter offering him $2,307.69 representing two weeks' pay in lieu of notice and reminding him of his contractual obligations, including return of company property. The letter also offered $10,667.06, which it characterized as a repayment for "start-up costs". Mr. Jia was escorted off the premises that day.

[38]   Mr. Jia refused to sign the letter and accept the payments, which he characterizes as a settlement offer in exchange for Mr. Jia relinquishing any ownership interest in Skycope.

[39]   Mr. Jia did not return a company laptop that he had taken with him on a business trip to China in November 2017. The laptop had a copy of the Skycope Code on its hard drive. Mr. Jia's access to the Skycope Code through GitHub was disabled when his employment was terminated.

[40]   Shortly afterwards, on January 9, 2018, Dr. Pan gave his notice of resignation. He gave Skycope four weeks working notice, leaving on February 6, 2018.

[41]   Mr. Wu resigned on January 22, 2018 and his last work day was February 2, 2018.

[42]   Mr. Zhuang resigned around the same time. His last work day was February 26, 2018.

[43]   Skycope terminated Mr. Zhang's employment on February 26, 2018, at the end of his three-month probationary period.

[44]   Mr. Li left Skycope on April 20, 2018, when his co-op term ended. He declined Skycope's offer of a full-time position in quality assurance.

[45]   Bluvec was incorporated on March 6, 2018 on the understanding that it would be Mr. Jia's company. The plaintiff says its focus was on wireless anti-drone technology. The defendants say its focus was on security solutions for the "internet of things" ("IOT")[4], including wireless anti-drone technology.

[46]   Beijing Lizheng Technology Co. Inc. ("Lizheng") was also incorporated in China in March 2018. The relationship between Lizheng and Bluvec is contested. The defendants say that Bluvec was Lizheng's agent in Canada and that Lizheng is Bluvec's biggest customer; Skycope says that Mr. Jia is the owner of Lizheng and that the companies were working together to compete with Skycope under Mr. Jia's direction.

[47]   Mr. Zhang began working for Mr. Jia part-time in March 2018. Mr. Zhuang started working for Mr. Jia or Bluvec part-time in April 2018. Dr. Pan formally started working for Bluvec in June 2018, but did some work for Mr. Jia before that. Mr. Wu joined Bluvec in June 2018 but also may have done some work for Mr. Jia before then. Mr. Li started working for Bluvec in July 2018.

[48]   Skycope learned of Bluvec's existence in June 2018, when Ali Zarei Ghanavati, an acquaintance of Dr. Boostanimehr, told Mr. Liu that he had met Mr. Jia and Dr. Pan at a job interview for a wireless signal processing engineer position at Bluvec.

[49]   In July 2018, Skycope retained Denis Gagnon, a private investigator, to find out whether the defendants were designing and marketing anti-drone technology and using the Skycope Technology to do so. Skycope provided Mr. Gagnon with the

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[4] Companies in the business of IOT technology develop and endow physical objects, such as smart watches, televisions and home security systems, with the ability to connect and exchange data across networks.

names of Mr. Jia, Dr. Pan and Mr. Zhang. Mr. Gagnon and his team discovered that the three were hiring technology employees to work for Bluvec.

[50]   Mr. Gagnon rented office space in Bluvec's office building in Burnaby. One of his team members approached Mr. Zhang, saying that they were having a drone problem at their cannabis warehouse. Mr. Zhang gave them a PowerPoint presentation and a brochure describing Bluvec's product, including its cost. Mr. Zhang, Mr. Jia and Dr. Pan also gave a demonstration of their product to Mr. Gagnon's team at Adanac Park on August 30, 2018. They showed how it could detect a DJI Phantom 4 drone, take control of it and cause it to land.

[51]   Subsequently, Skycope learned of another company, Blue Origin. Based on a Blue Origin marketing brochure, Skycope says Bluvec and Lizheng are both associated with Blue Origin. The defendants say that Blue Origin has no connection to Bluvec.

WITNESSES, CREDIBILITY AND RELIABILITY

Legal Principles Governing Credibility and Reliability

[52]   Credibility and reliability are different concepts. Credibility has to do with a witness's veracity, whereas reliability has to do with their ability to accurately observe, recall and recount events in issue. A witness whose evidence on an issue is not credible cannot give reliable evidence on that point. However, a witness's evidence on a point may be credible yet not reliable: *Radacina v. Aquino*, 2020 BCSC 1143 at paras. 94-95.

[53]   In the oft-cited case of *Bradshaw v. Stenner*, 2010 BCSC 1398, aff'd 2012 BCCA 296, leave to appeal to SCC ref'd, 35006 (7 March 2013), Justice Dhillon summarized the principles governing credibility assessment:

> [186]   Credibility involves an assessment of the trustworthiness of a witness' testimony based upon the veracity or sincerity of a witness and the accuracy of the evidence that the witness provides (*Raymond v. Bosanquet (Township)* (1919), 59 S.C.R. 452, 50 D.L.R. 560 (S.C.C.)). The art of assessment involves examination of various factors such as the ability and opportunity to observe events, the firmness of his memory, the ability to resist

the influence of interest to modify his recollection, whether the witness' evidence harmonizes with independent evidence that has been accepted, whether the witness changes his testimony during direct and cross-examination, whether the witness' testimony seems unreasonable, impossible, or unlikely, whether a witness has a motive to lie, and the demeanour of a witness generally (*Wallace v. Davis*, [1926] 31 O.W.N. 202 (Ont.H.C.); *Faryna v. Chorny*, [1952] 2 D.L.R. 354 (B.C.C.A.) [*Farnya*]; *R. v. S.(R.D.),* [1997] 3 S.C.R. 484 at para.128 (S.C.C.)). Ultimately, the validity of the evidence depends on whether the evidence is consistent with the probabilities affecting the case as a whole and shown to be in existence at the time (*Farnya* at para. 356).

[54]   As explained in *Matrox Electronic Systems Ltd. c. Gaudreau*, [1993] R.J.Q. 2449, 1993 CarswellQue 1764 (S.C.J.), credibility is frequently a crucial issue in breach of confidence cases:

> In cases involving confidential business information, misuse can rarely be proved by convincing direct evidence. In most cases, employers must construct a web of perhaps ambiguous circumstantial evidence from which the Court may draw inferences which convinced it that it is more probable than not that what employers alleged happened did in fact take place. Against this often delicate construct of circumstantial evidence, there frequently must be balanced the testimony of the employees and their witnesses who directly deny everything.

[55]   This is an apt description of the evidence in the present case.

Mr. Liu

[56]   Mr. Liu's evidence in direct examination tended to be self-aggrandizing. For example, he stressed that the Skycope Technology was his own idea, minimizing both the contributions of others and the existence of similar technology already on the market. Only in cross-examination did he admit that he learned about how to decode a DJI Phantom 3 drone from an internet article.

[57]   Mr. Liu's answers to many questions put to him in cross-examination were vague and evasive. He frequently claimed that he could not recall significant events. His animosity to Mr. Jia appeared to be a driving factor in his evidence about Mr. Jia's contributions and activities at Skycope. At times, he seemed to be inferring from Mr. Jia's conduct after he left Skycope what he must have done before that.

[58]　More specifically, Mr. Liu insisted that Mr. Jia was not a founder of Skycope. When he was taken to a paragraph in Skycope's Notice of Civil Claim stating that Mr. Jia was a founder of Skycope, he disagreed with it. Similarly, when taken to an email in which he had listed Mr. Jia as a shareholder of Skycope, he claimed that he had made an error.

[59]　Although Mr. Liu testified that Skycope's confidential information included the hardware components of its product, he was unable to identify any unique or confidential features of that hardware. For example, he initially testified that the antenna Skycope used was unique, but then was forced to admit that it was not. The same was true about the circuit board and other hardware components. Mr. Liu also testified that Bluvec took Skycope's customers, but he was unwilling or unable to identify any such customer. He admitted that Skycope did not have a customer list.

[60]　Mr. Liu was very critical of Mr. Jia for remaining in full time employment with Fortinet after Mr. Liu had left paid employment to work full time on the proof of concept and prototype. He described Mr. Jia as "sitting in the safe room for eight months". At the same time, he denied that Mr. Jia had any more than minimal involvement with the project.

[61]　Mr. Liu also denied that Mr. Jia contributed approximately $10,000 to Skycope's start-up costs. When taken to the termination letter, which refers to Mr. Jia having "invested certain money to assist in the start-up costs for Skycope equalling $10,167.06", he said this was an error made by an incompetent lawyer.

[62]　For these reasons, I find that Mr. Liu was not a credible witness. Unless his testimony was contrary to his interest or corroborated by documentary or other reliable evidence, I do not rely on it.

Mr. Jia

[63]　Mr. Jia's evidence was equally influenced by animosity. He described Mr. Liu as having ambushed him and stabbed him in the back. Mr. Jia's evidence on the

nature of Bluvec's business and his relationship with Lizheng and its CEO, Mr. Lei, demonstrate his lack of credibility.

[64]   At trial, Mr. Jia repeatedly said that Bluvec's business was about much more than wireless anti-drone technology, describing it as engaged in developing "wireless security solutions" and IOT technology. This is inconsistent with an affidavit he made in October 2018, in which he stated that "[t]he development and marketing of anti-drone technology is currently Bluvec's sole project". When taken to this evidence, Mr. Jia testified that this was a mistake in his affidavit.

[65]   Mr. Jia consistently downplayed the relationship he and Bluvec had with Mr. Lei and Lizheng. In his affidavit of January 11, 2021, he affirmed that he had:

> …no knowledge as to the scope of Lizheng's operations or marketing efforts in China, or anywhere else. Lizheng has its own management and research team, with whom [he had] never dealt with directly in any capacity, or relayed any information to them.

[66]   During his examination for discovery, Mr. Jia denied knowing that Bluvec had leased hardware from Lizheng to demonstrate the Bluvec Technology. He reluctantly admitted that Bluvec has sold things to Lizheng but refused to identify what, saying that this was a business secret.

[67]   At trial, Mr. Jia admitted that Bluvec was Lizheng's Canadian agent and that Lizheng was Bluvec's biggest customer. When asked about their agency agreement, he said it was oral. When asked why he had not disclosed the relationship between the companies before trial, he said it was because Bluvec had not been successful in selling Lizheng's product.

[68]   Mr. Jia was shown a brochure written in Chinese for a company called Blue Origin that sets out its business plan for potential investors. The brochure includes a page describing the company as started by five co-founders, including Mr. Jia, Dr. Pan, Mr. Zhuang, Mr. Wu, and Mr. Lei. Mr. Jia denied any knowledge of the brochure, saying he saw it for the first time when it was put to him at his examination for discovery. He testified that Mr. Lei subsequently told him that he had added Mr. Jia's name in order to attract financing.

[69]   When asked why the defendants did not call Mr. Lei as a witness, Mr. Jia said that, as a Chinese person who cares about face, he could not put Mr. Lei in an embarrassing situation. Regardless of the importance to Mr. Jia of not embarrassing Mr. Lei, the clear conflict between the documentary record and Mr. Jia's testimony on key points, which could have been addressed by Mr. Lei, adds significantly to my doubts about his credibility.

[70]   Mr. Jia also denied that he was a beneficial owner of shares in Lizheng, testifying that Mr. Lei had forged his signature on two documents confirming that 20% of Lizheng's shares are held in trust for Mr. Jia by one individual and that 80% of Lizheng's shares are held in trust for Mr. Jia by another individual ("Entrustment Agreements"). Again, the absence of any of these potential witnesses is telling.

[71]   Some evidence on this issue is found in a decision of the Beijing Arbitration Commission dated March 12, 2021 ("Arbitration Decision"), which concerns Mr. Jia's shares in Shengkong. It was tendered in evidence by the plaintiff and I recognized it under s. 35 of the *International Commercial Arbitration Act*, R.S.B.C. 1996, c. 233.

[72]   In their closing submissions, both parties rely on facts found in the Arbitration Decision that were central to the issues before that tribunal. While the conditions for issue estoppel are not met, it is appropriate to give weight to the Arbitration Decision's findings of fact: *Ontario (Human Rights Commission) v. Naraine*, [2001] O.J. No. 4937 (C.A.), 2001 CanLII 21234 at paras. 24, 42, 72, leave to appeal to SCC ref'd 29073 (17 October 2002).

[73]   The Arbitration Decision found that Mr. Jia was a shareholder of Lizheng and that the Entrustment Agreements were authentic, rejecting his claim that Mr. Lei had forged his signature on them.

[74]   For these reasons, I conclude that Mr. Jia was not a credible witness. Unless his evidence was contrary to his interest or corroborated by documentary or other reliable evidence, I do not rely on it.

Dr. Boostanimehr

[75]   Dr. Boostanimehr is a software engineer who has worked at Skycope since 2017. He is currently its Chief Technical Officer. Dr. Boostanimehr gave his evidence in a clear and straightforward manner. He was not shaken on cross-examination. Much of his evidence concerned the work he and the individual defendants did in developing the Skycope Technology. Apart from pointing out Dr. Boostanimehr's employment with Skycope, the defendants do not address his credibility or the reliability of his evidence. I accept that he is a credible and reliable witness.

Dr. Pan

[76]   I reach a different conclusion with respect to Dr. Pan. He was combative on cross-examination and gave long-winded and evasive responses. During his cross-examination, Dr. Pan was shown a list of source code files written by him that were later used in Bluvec's source code ("Bluvec Code"). The date stamps that are generated when a file is created show that he had written 65 source code files while he was still working at Skycope. His explanation that he had written them out of personal interest in the subject matter and not for Skycope, which was paying him to write code, was not credible.

[77]   Dr. Pan admitted he was good friends with Mr. Jia, and that he gave his notice of resignation from Skycope very soon after Mr. Jia was fired. Dr. Pan's evidence that the two events were not connected was unconvincing. His letter of resignation gave no reasons for his departure.

[78]   At trial, Dr. Pan testified that he left Skycope because he did not get stock options that he wanted, he had concerns about the safety of his work environment, that Skycope was not complying with Canadian airspace regulations, and that it was using pirated software. None of these reasons are persuasive.

[79]   Mr. Liu had offered Dr. Pan stock options in December 2017, but they did not materialize. While this might be a reason to resign, there is no evidence that Dr. Pan ever raised this with Mr. Liu.

[80]   Dr. Pan testified that it was Mr. Liu, not Mr. Jia, who directed him to conduct experiments that exposed him to radiation that was bad for his heart. He did not explain why Mr. Liu would direct him to do this when Mr. Jia was the head of the technical team.

[81]   While Dr. Pan pointed to the fact that Skycope did not have a permit required by air safety regulations to fly the drones it used in demonstrations, he agreed in cross-examination that Bluvec did not have a permit for the drone demonstration it conducted on August 30, 2018 in which Dr. Pan participated. Dr. Pan also agreed in cross-examination that he brought the allegedly pirated software to Skycope on his student licence and continued to use it after the licence expired.

[82]   Dr. Pan also said that he left Skycope because he was interested in pursuing work in software engineering at Amazon. He admitted that he did not have the necessary skills for that type of job, so he intended to work on improving them on his own time after leaving Skycope. However, he then decided to join Bluvec.

[83]   Dr. Pan is listed as the inventor on patent applications that Lizheng filed in China in August 2018. He denied that he worked on them and was unable to explain why his name appeared on them.

[84]   For these reasons, I conclude that Dr. Pan was not a credible witness. I do not rely on his evidence unless it was contrary to his interest or corroborated by documentary or other reliable evidence.

Other Individual Defendants

[85]   The four other individual defendants were relatively minor players in this dispute. While Skycope gives some concrete examples of Mr. Zhang's lack of credibility, it does not do so for Mr. Li, Mr. Wu or Mr. Zhuang, simply suggesting that their evidence should be approached with caution.

[86]   There is reason to doubt Mr. Zhang's credibility. In particular, his admission that he encountered Mr. Pan and Mr. Wu multiple times when he was working in Mr.

Jia's basement in March 2018, but did not realize they were "helping" Mr. Jia is not believable. Given the close quarters in Bluvec's Burnaby offices, Mr. Zhang's lead role in marketing Bluvec's product to Mr. Gagnon in August 2018 and his involvement with Lizheng when he was in China, Mr. Zhang's insistence that he was unaware that the product had been sent to Bluvec by Lizheng is also not believable. I do not rely on Mr. Zhang's evidence unless it was contrary to his interest or corroborated by documentary or other reliable evidence.

[87]   It is not necessary for me to comment on the credibility of Mr. Li, Mr. Wu or Mr. Zhuang, or the reliability of their testimony, because nothing of importance in this litigation turns on their unsupported testimony.

MR. JIA'S EMPLOYMENT CONTRACT WITH SKYCOPE

[88]   The parties agree that Mr. Jia was employed by Skycope but they disagree about the terms of his employment. Skycope relies on a written contract dated September 1, 2016 ("Written Contract") that Mr. Jia signed some time after he started working at Skycope in October 2016. The defendants say that Skycope and Mr. Jia entered into an oral contract before Mr. Jia left his job at Fortinet.

[89]   The legal principles governing contract formation were recently restated in *Oswald v. Start Up SRL,* 2021 BCCA 352 at paras. 33-34:

> [33]   …. As the Supreme Court of Canada has recently confirmed, a contract is formed when the parties "have indicated to the outside world, in the form of the objective reasonable bystander, their intention to contract and the terms of such contract", and the surrounding circumstances may be considered: G.H.L. Fridman, *The Law of Contract in Canada*, 6th ed. (Toronto: Carswell, 2011) at 15; *Ethiopian Orthodox Tewahedo Church of Canada St. Mary Cathedral v. Aga*, 2021 SCC 22 at paras. 36–37 [*Ethiopian Orthodox*]. The court must consider "how each party's conduct would appear to a reasonable person in the position of the other party": *Owners, Strata Plan LMS 3905 v. Crystal Square Parking Corp.*, 2020 SCC 29, at para. 33. "The question in every case is what intention is objectively manifest in the parties' conduct": *Ethiopian Orthodox* at para. 38.
>
> [34]   The applicable legal principles to determine whether an enforceable contract has been formed were succinctly set out in Mr. Mhamunkar's factum at para. 67 as follows:
>
>> (a) there must be an intention to contract;

(b) the essential terms must be agreed to [by] the parties;

(c) the essential terms must be sufficiently certain;

(d) whether the requirements of a binding contract are met must be determined from the perspective of an objective reasonable bystander, not the subjective intentions of the parties; and

(e) the determination is contextual and must take into account all material facts, including the communications between the parties and the conduct of the parties both before and after the agreement is made.

[90]   The rules regarding contract formation and enforcement are relaxed in the employment context, as discussed in *Lacey v. Weyerhaeuser Company Limited*, 2013 BCCA 252 at para. 64:

> [64]   These arguments were made at trial and are clearly met in the trial judgment. At para. 91, the judge correctly instructed himself that the requirement of certainty in contract law is relaxed to some extent with respect to employment contracts. Reference was made to the following passages from Geoff England, Innis Christie & Merran Christie, *Employment Law in Canada*, 3d ed., looseleaf (Toronto: Butterworths, 1998):
>
> > 7.61 . . . Modern courts are sensitive to the fact that parties to relational contracts in the commercial sphere require a relatively high degree of incompleteness, ambiguity and flexibility for their agreements to operate successfully. Accordingly, the courts do the utmost to flesh out the contractual skeleton, especially by liberal use of implied terms, in order to maintain the contract rather than see it avoided. In the employment context, too, courts will strive to uphold vague and incomplete contracts of employment by making reasonable inferences from the parties' verbal statements, written documentation, past practices and the generally accepted standards of industrial behavior.
> >
> > 7.62 When construing written and verbal representations, the courts must decide whether a reasonable person in the position of the parties would have intended that the representation have contractual force, and the answer is likely to be in the affirmative the more detailed and clear the representation ...

[91]   Skycope does not really dispute that before Mr. Jia left Fortinet, Mr. Liu and Mr. Jia agreed to terms about Mr. Jia's job title, which would be Chief Technology Officer, and his salary, which would be $60,000, representing about half of his base pay at Fortinet.

[92]   Mr. Jia testified that he and Mr. Liu also agreed that he would get an equity interest in Skycope, pointing to WeChat messages between him and Mr. Liu about

the ratio of their equity interests, and a draft shareholders' agreement that would have allotted him equity in Skycope. Mr. Jia said that he and Mr. Liu had agreed that he would have a smaller interest in Skycope than Mr. Liu because Mr. Liu was to be its CEO. Mr. Jia also admitted that, as of September 6, 2016, he and Mr. Liu had agreed on the general principles governing their equity interests, "but not the specific proportion or ratio".

[93]   Mr. Liu acknowledged that he and Mr. Jia discussed Mr. Jia having an equity interest in Skycope, but said they never reached a final agreement. He said that, in Skycope's first round of financing, Chinese investors demanded that Skycope be a fully-owned subsidiary of Shengkong as a condition of their investment in Shengkong, so Mr. Jia agreed to an equity interest in Shengkong instead.

[94]   On July 23, 2016, Mr. Liu sent an email to Mr. Jia entitled "Equity Distribution Memo" setting out the share distribution at 60% for Mr. Liu, 30% for Mr. Jia, and 10% for future shareholders.

[95]   Screenshots of WeChat texts between Mr. Jia and Mr. Liu on September 15 and 16, 2016, do not include full conversations. Mr. Jia points to one screenshot of a photo showing what Mr. Jia says is a 3:2 share ratio, to which Mr. Liu responded with a WeChat voice note. The transcription of that note reads:

> Okay, fine. Then let's make a final decision on this and quickly… [start]… looking for an office.

[96]   Mr. Jia also testified that they finally agreed upon a 5:3 ratio. Absent any other investors, that would mean Mr. Jia had a 37% equity interest.

[97]   Mr. Liu sent a draft Skycope shareholders' agreement to Mr. Jia on December 1, 2016. It allocated five million common shares for Mr. Liu, three million common shares for Mr. Jia and 100,000 common shares to a Mr. Ken Lin. There are no other drafts of this agreement. Mr. Jia testified that this agreement was not signed because Mr. Liu told him that Mr. Lin had forwarded the draft to his lawyer to prepare a formal version of the agreement. There is no evidence about whether anything more resulted from the draft agreement and no one called Mr. Lin as a witness.

[98]   Mr. Jia's termination letter acknowledges that Mr. Jia loaned Skycope roughly $10,000 for "start-up costs." This is consistent with him having an equity interest in Skycope.

[99]   Is this evidence sufficient to establish the essential terms of an oral contract of employment between Mr. Jia and Skycope?

[100]   What constitutes an essential term of an employment contract is fact-specific: *Hucul v. GN Ventures Ltd.*, 2022 BCSC 144 at para. 140. Essential terms of employment contracts may include position title, start date and compensation, such as salary, benefits and profit-sharing: *Cottrill v. Utopia Day Spas and Salons Ltd.*, 2017 BCSC 704 at para. 120; *Moore v. Thomas Fuller Construction Co. (1985) Ltd.*, [2002] O.J. No. 2867 (Ont. S.C.J.), 115 A.C.W.S. (3d) 798, aff'd [2003] O.J. No. 4214 (C.A.), 126 A.C.W.S. (3d) 262.

[101]   A court is not restricted to the "four corners" of the alleged contract, but may look at all surrounding circumstances, including evidence of past agreements: *Leemhuis v. Kardash Plumbing Ltd.*, 2020 BCCA 99 at para. 17. Additionally, the fact that the parties acted as if they had a binding agreement after entering into an understanding carries great weight when assessing whether an unformalized agreement is binding: *Matic et al. v. Waldner et al.*, 2016 MBCA 60 at para. 63, leave to appeal to SCC ref'd 37161 (19 January 2017). A binding contract may be found even where the parties continued to discuss different equity ratios: *Medjed v. 1007323 Ontario Inc.*, [2004] O.J. No. 4728, 135 A.C.W.S. (3d) 77.

[102]   In *Ethiopian Orthodox Tewahedo Church of Canada St. Mary's Cathedral v. Aga*, 2021 SCC 22 at para. 18, the Court stated, "The question is not what the parties subjectively had in mind but rather whether their conduct was such that a reasonable person would conclude that they had intended to be bound." The Court of Appeal's direction in *Lacey* that courts should strive to determine the terms of and uphold employment contacts as much as possible bears repeating.

[103]   Applying these principles, I find that Mr. Liu and Mr. Jia agreed on essential terms that created an oral employment contract between Skycope and Mr. Jia.

[104]   Mr. Jia would not have left his position at Fortinet without having reached agreement on the key terms of his employment at Skycope. He was married and had a young child. Mr. Liu described Mr. Jia as risk-averse in financial matters. He said he was doing his best to persuade Mr. Jia to leave Fortinet and join Skycope. Documentary evidence supports Mr. Liu's statement. In light of this, it is inconceivable that Mr. Jia would have left Fortinet to join Skycope in October 2016, for half his Fortinet salary and have loaned it some $10,000 without having reached an agreement about his equity interest in the enterprise.

[105]   The evidence does not support Mr. Liu's assertion that Mr. Jia agreed to take an equity interest in Shengkong instead of Skycope. At the time of contract formation, Mr. Liu and Mr. Jia did not know that the Chinese investors would demand that Shengkong own Skycope. I find that they agreed that Mr. Jia would have an equity interest in Skycope.

[106]   Skycope also argues that no contract was formed because the amount of Mr. Jia's equity interest was never agreed upon. I disagree. In my view, Mr. Jia has established on a balance of probabilities that he and Mr. Liu agreed that he would have a 30% interest in Skycope. This amount accords with Mr. Liu's July 23, 2016 email to Mr. Jia specifying that amount. I do not accept Mr. Jia's uncorroborated testimony that the parties subsequently agreed he would have a 37% equity interest.

[107]   The evidence demonstrates that there were subsequent negotiations, including with others, such as Mr. Lin. However, that fact is not inconsistent with Mr. Jia and Skycope having concluded an oral contract.

[108]   The parties' subsequent actions are consistent with a mutual understanding that they had a binding agreement. Mr. Jia made the $10,000 loan to Skycope sometime between August and October 2016, which Skycope accepted. When Mr. Jia left Fortinet, he immediately became Chief Technical Officer of Skycope.

[109]   I conclude that Mr. Jia and Skycope entered into a binding employment agreement ("Oral Contract") at the time Mr. Jia left Fortinet. Its essential terms were that Mr. Jia would leave his current employment and loan Skycope $10,000. In return, he would become CTO, receive an annual salary of $60,000 and a 30% equity interest in Skycope.

[110]   As the individual defendants testified that it is standard for employment contracts in start-up technology enterprises to have confidentiality clauses, I find that such a clause was an implied term of the Oral Contract.

[111]   It follows from this that the Written Contract was a modification of the Oral Contract.

Is the Written Contract between Mr. Jia and Skycope Enforceable?

[112]   Where the terms of an existing contract are modified to impose more onerous or less advantageous conditions on the employee, they must be supported by consideration: *Singh v. Empire Life Ins. Co.,* 2002 BCCA 452 at paras. 12-13; *Quach v. Mitrux Services Ltd.*, 2020 BCCA 25 at para. 13.

[113]   The defendants submit that the Written Contract is not enforceable for lack of consideration. The plaintiff does not address this submission.

[114]   It is apparent on the face of the Written Contract that its terms are less favorable to Mr. Jia. It establishes a base salary of $1 and contains restrictive covenants. There is no evidence that Skycope provided any fresh consideration to Mr. Jia. I find that the Written Contract is unenforceable.

SKYCOPE'S CONFIDENTIALITY CLAIMS

[115]   Skycope claims that the defendants took its confidential information, including the Skycope Code, its research and development know-how, its patent applications and patents, its market research strategies, business plans and marketing materials, its employment contracts, and its client, consumer and supplier lists. It argues that this conduct is a breach of confidence at common law and a breach of the

confidentiality obligations in its employment contracts with each individual defendant. It also submits that Bluvec knowingly received and misused Skycope's confidential information.

Legal Principles Governing Breach of Confidentiality

[116]   Both parties' closing submissions rely on the framework articulated in *Lac Minerals Ltd. v. International Corona Resources Ltd.*, [1989] 2 S.C.R. 574, 1989 CanLII 34 for breach of confidentiality at common law. A plaintiff must prove that:

1.   the information is confidential;

2.   the information was communicated in confidence; and

3.   the defendant misused the confidential information, to the detriment of the party conveying the information.

[117]   Recognizing the plaintiff's onerous evidentiary burden in breach of confidence claims, the court of appeal has held that strong circumstantial evidence can be sufficient to establish possession and misuse: *GEA Refrigeration Canada Inc. v. Chang*, 2020 BCCA 361 at para. 73 [*GEA*]:

> The appellants contend that the judge's finding that the appellants possessed and used GEA's confidential drawings was "unsupported by any direct evidence". They say that the judge committed a palpable and overriding error in making her finding. I am unpersuaded. The judge based her finding on strong circumstantial evidence, and it was open to her to make the finding that she did.

[118]   Generally, to be confidential, information must be inaccessible, have a quality of originality or uniqueness, and must not be in the nature of "know-how": *Blue Line Hockey Acquisition Co., Inc. v. Orca Bay Hockey Limited Partnership*, 2007 BCSC 143 at para. 77 [*Blue Line*].

[119]   The determination of confidentiality is context and fact-specific. The threshold for this first step is relatively low: *Sateri (Shanghai) Management Limited v. Vinall*, 2017 BCSC 491 at para. 467. As Justice Binnie stated in *Cadbury Schweppes Inc. v. FBI Foods Ltd.*, [1999] 1 S.C.R. 142, 1999 CanLII 705:

> 75   ... Equity has set a relatively low threshold on what kinds of
> information are <u>capable</u> of constituting the subject matter of a breach of
> confidence. In *Coco v. A. N. Clark (Engineers) Ltd.*, *supra*, Megarry J., at p.
> 47, considered that "some product of the human brain" applied to existing
> knowledge might suffice. A similarly expansive concept was adopted in *Lac
> Minerals* at p. 610 by Sopinka J., quoting Lord Greene M.R. in *Saltman
> Engineering Co. v. Campbell Engineering Co.* (1948), 65 R.P.C. 203 (C.A.),
> at p. 215. …
>
> [Emphasis in original.]

[120]   A plaintiff must be precise about what information is alleged to be confidential:
JTT Electronics Ltd. v. Farmer, 2014 BCSC 2413 at paras. 39-41; *Kamloops-
Cariboo Regional Immigrants Society v. Herman*, 2015 BCSC 886 at para. 114.
Justice Wedge expanded on this point in *Blue Line* at para. 63:

> [63]   In breach of confidence cases, the plaintiff ought to specifically
> identify the information over which it claims a proprietary right, and the
> circumstances in which knowledge of the information came into the
> possession of the defendant such that use of the information by the
> defendant would be unconscionable: see *Napier Environmental Technologies
> v. Vitomir*, 2001 BCSC 1704 at para. 28 [*Napier*] citing *G.D. Searle & Co. Ltd.
> v. Celltech Ltd.*, [1982] F.S.R. 92 at 109 (S.C.J. – Eng. C.A.) [*Searle*].
> Although *Napier* and *Searle* dealt with ex-employees allegedly using
> confidential information in the nature of trade secrets, I consider the level of
> particularity required in those cases to be equally applicable to the
> circumstances of the present case.

[121]   Information that is readily obtainable from a known source is not confidential;
however, if using it saved a defendant the substantial time, effort and expense that
would otherwise have taken to obtain it, it may be confidential for the purposes of a
breach of confidentiality claim: *GEA* at para. 135. In *Imperial Sheet Metal Ltd. et al.
v. Landry and Gray Metal Products Inc.*, 2007 NBCA 51 at para. 33 [*Imperial Sheet
Metal*], the court stated:

> …a former employee is entitled to exploit freely the general skills and
> knowledge acquired as a result of the employment relationship, so long as
> that knowledge is a product of his or her memory and unaided by the
> employer's documentation.

[122]   A plaintiff must also be precise about what know-how is confidential: *Napier
Environmental Technologies Inc. v. Vitomir*, 2001 BCSC 1704 at paras. 26-28.

[123]   With respect to the second element of the test, that the information be
communicated in confidence, the defendants agree that the Skycope Code was

communicated in confidence, but dispute this element with respect to the other things over which Skycope claims confidentiality.

[124]   In *No Limits Sportswear Inc. v. 0912139 B.C. Ltd.*, 2015 BCSC 1698 [*No Limits*], the court discussed the meaning of this element:

> [15]   An obligation to keep information confidential may arise by express contract, or by implication based on the circumstances and relationship of the parties.
>
> [16]   Even if no mention of confidentiality is made, a communication may be considered to have been made in confidence if there was a mutual understanding that the parties were working towards a joint venture or some other business arrangement: *Lac Minerals* at 612-613.
>
> [17]   In *Lac Minerals* at 612-613, and at 642, the Court adopted the following passage of the judgment of Megarry J. in *Coco v. A. N. Clark (Engineers) Ltd.*, [1969] R.P.C. 41. at 48:
>
>> In particular, where information of commercial or industrial value is given on a business-like basis and with some avowed common object in mind, such as a joint venture or the manufacture of articles by one party for the other, I would regard the recipient as carrying a heavy burden if he seeks to repel a contention that he was bound by an obligation of confidence….

[125]   The third element in a breach of confidence claim is unauthorized use to the detriment of the plaintiff. *Lac Minerals* at 642 held that "[a]ny use other than a permitted use is prohibited and amounts to a breach of duty". However, to satisfy this element, a defendant must be shown to know that they are unlawfully using confidential information: *CCS Corp. v. Secure Energy Services Inc.*, 2016 ABQB 582 at para. 85.

[126]   There has been some uncertainty about what constitutes detriment and what is necessary to establish it. In *Cadbury*, Binnie J. adopted a broad approach to what constitutes detriment:

> 53   ... While La Forest J. in *Lac Minerals* considered detriment to be an essential element of the breach of confidence action (Sopinka J. did not express a view on this point in his discussion of the applicable principles), it is clear that La Forest J. regarded detriment as a broad concept, large enough for example to include the emotional or psychological distress that would result from the disclosure of intimate information (see, e.g., *Argyll (Duchess) v. Argyll (Duke)*, [1967] Ch. 302. In the *Spycatcher* case, *supra*, Lord Keith of Kinkel observed, at p. 256, that in some circumstances the disclosure itself might be sufficient without more to constitute detriment:

> So I would think it a sufficient detriment to the confider that information given in confidence is to be disclosed to persons whom he would prefer not to know of it, even though the disclosure would not be harmful to him in any positive way.

[127]   In *No Limits* the court found that "in a case where the only remedy claimed is compensation for the plaintiff's losses, failure to prove any losses would mean failure to prove entitlement to a remedy": para. 31. Taken alone, the fact that the defendant has entered the market with a rival product is not proof of detriment: *No Limits* at para. 142.

[128]   With respect to contractual confidentiality obligations, parties are free to agree to broader confidentiality obligations than those imposed by common law. However, a contractual breach of confidentiality claim must be made out on the contract. A contract's broader definition of confidential information does not become the definition of "confidential information" under the *Lac Minerals* test: *Scott & Associates Engineering Ltd. v. Finavera Renewables Inc.*, 2013 ABQB 273 at paras. 78-80, aff'd 2015 ABCA 51, leave to appeal to SCC ref'd 36380 (29 October 2015).

Common Law Breach of Confidence Analysis

Was Skycope's Information Confidential?

[129]   The defendants concede that the Skycope Code is confidential. They dispute all of the other categories of information over which confidentiality is claimed, including research and development know-how, market research, patent applications and patents, business plans, marketing materials, employment contracts, and client, consumer and supplier lists.

[130]   Other than the Skycope Code and market research, Skycope's confidentiality claims fail to satisfy one or more elements of the test for confidentiality. They are based on the unsupported evidence of Mr. Liu and they do not specify precisely what is alleged to be confidential.

[131]   All of the defendants had research and development know-how in their interrelated fields before joining Skycope. Skycope accepts that this know-how is not confidential.

[132]   Skycope argues that the defendants, particularly Mr. Jia and Dr. Pan, had no know-how relating to wireless anti-drone technology before working at Skycope, implying that anything they learned on the subject is confidential.

[133]   Know-how about "wireless anti-drone technology" in general is too broad a subject to fall within the definition of know-how for the purposes of breach of a confidentiality claim.

[134]   Following the reasoning in *Napier Environmental Technologies,* above, if Skycope had given examples of particular calculations, simulations or experimentation for specific drones carried out to develop the Skycope Technology and what particular employees learned from them, this information could have been found to be confidential. As such evidence was not led, the plaintiff has not shown that the defendants' research and development know-how was confidential.

[135]   Skycope characterizes its Chinese patent applications and patents as confidential, referring to Dr. Pan's involvement with them and the subsequent, strikingly similar patent applications filed by Lizheng. There is no evidence about whether patent applications and patents are confidential under Chinese law. They are not confidential under Canadian law: *XY, LLC v. Canadian Topsires Selection Inc.*, 2014 BCSC 2017 at para. 24.

[136]   Mr. Liu and Mr. Jia testified that they each conducted extensive market research on the anti-drone market, including on competitors. I accept Mr. Jia's evidence, which is against his self-interest, about the amount of such research he carried out for Skycope's benefit. I find that it was confidential in character.

[137]   Skycope's submission did not address its business plans and there is no evidence of what they were.

[138]   With respect to marketing materials, Skycope pointed to the similarities between its marketing brochure and that created for Bluvec. Some similarity is to be expected since both are marketing similar products. The plaintiff acknowledges that the defendants could have come up with this brochure on its own. However, Skycope asks me to infer from the defendants' lack of evidence showing when and how their brochure was created that it must have been copied from Skycope. Having reviewed the marketing brochures myself, without the benefit of any evidence about how similar these types of marketing materials are, I am not satisfied that they are sufficiently similar to support an inference of copying.

[139]   Skycope claims that Bluvec copied Skycope's employment contracts based on the similarities between the two. Again, I agree that the two sets of contracts are very similar. However, the evidence does not establish that Skycope itself created its contracts (for example, through its lawyers) rather than obtaining them from an open source. The evidence does not establish that the employment contracts were confidential in character.

[140]   Skycope's claim about the confidential character of its clients and consumer supplier lists fails because it did not lead evidence to establish that these lists exist. Mr. Liu admitted that Skycope did not have a client list.

[141]   Under the common law breach of confidence analysis, I find that, of the categories of confidential information claimed, only the Skycope Code and the market research Skycope conducted on wireless anti-drone products are confidential in character.

Was the Information Communicated in Confidence?

[142]   The defendants concede that the Skycope Code was communicated to them in confidence.

[143]   The evidence establishes that Mr. Jia acquired information about the wireless drone market in confidence for Skycope. The obligation to keep information confidential may arise by implication based on the circumstances and relationship of

the parties: *No Limits* at para. 15. As Skycope's Chief Technology Officer, I find that Mr. Jia would have understood that this information was confidential.

Was the Confidential Information Misused to Skycope's Detriment?

[144]   Skycope asks me to infer that the defendants misused the Skycope Code thereby causing harm to the plaintiff based on similarities between the Skycope Code and the Bluvec Code, and the relatively short time between Bluvec's creation and the time it put its competing product on the market. Analysis of this claim requires detailed consideration of the expert evidence, as well as the evidence of Dr. Boostanimehr and Dr. Pan.

[145]   Before turning to that question, I have no difficulty concluding that the plaintiff has failed to establish that Mr. Jia or the other defendants misused Skycope's confidential market research to its detriment. There is no evidence supporting an inference that Mr. Jia misused Skycope market research rather than conducting his own market research for Bluvec. In light of the evidence that wireless anti-drone technology was a rapidly developing market, any market research Mr. Jia had conducted for Skycope would have quickly become out of date. I find that the plaintiff has not proved breach of confidentiality with respect to market research.

Access to the Skycope Code

[146]   While they were working at Skycope, both Mr. Jia and Dr. Pan had full access to the Skycope Code through GitHub. Mr. Jia admitted that, when his employment was terminated, he did not return a laptop that contained a version of the Skycope Code. That version was several weeks out of date because he had downloaded it to the laptop's hard drive to have access to it on a trip to China he made before his termination.

[147]   Dr. Pan had access to the Skycope Code throughout his four weeks of working notice. During that period, he wrote source code that would eventually become part of the Bluvec Code. He kept a personal library of code files he had

written over the years in employment and other contexts. It included some code files he had written for Skycope that he used in writing code for Bluvec.

[148]   Mr. Jia's and Dr. Pan's denials that they used the Skycope Code for the benefit of the defendants are not credible and I do not accept them.

[149]   As Mr. Wu wrote some code, he also had access to the Skycope Code.

[150]   Mr. Zhuang worked as a hardware manager for Skycope. Skycope does not point to any evidence that he had access to the Skycope Code.

[151]   Mr. Zhang and Mr. Li both worked on quality assurance. Skycope concedes that they did not have full access to the Skycope Code, only portions of it that were provided to them in a form they could use to conduct their tests.

[152]   I find that Mr. Jia, Dr. Pan, and Mr. Wu had the opportunity and means to access the Skycope Code and use it for the benefit of Bluvec and themselves. Mr. Zhuang, Mr. Zhang and Mr. Li did not.

Expert Evidence on the Skycope Source Code

[153]   I heard expert evidence from two witnesses: Dr. Hugh Smith for the plaintiff, and Dr. Thomas Gulliver for the defendants. Dr. Smith is a professor in the Department of Computer Science in the Computer Engineering program at the California Polytechnic State University. Dr. Gulliver is a professor in the Electrical and Computer Engineering Department of the Faculty of Engineering at the University of Victoria.

[154]   Both experts were given copies of the Skycope Code and Bluvec Code and asked to compare them. Each was asked to identify similarities between the two and to opine as to which, if any, similarities were attributable to common coding practices or publicly available information, and which could not be so attributed.

[155]   Each approached the task in a different way.

[156]   Dr. Smith described his analytical process as akin to that which he uses to identify plagiarism in the work of his students. He uses software that identifies similarities between segments of two codes, which he himself then analyzes for evidence of plagiarism. Dr. Boostanimehr identified segments of the Skycope and Bluvec Codes that he considered to be similar and provided them to Dr. Smith. Dr. Smith said he considered those segments, rejecting some as insufficient to support an inference of copying. Dr. Smith also independently identified other segments of code that he considered to be evidence of copying.

[157]   In his report and his testimony, Dr. Smith noted a number of legitimate reasons why there might be similarities between the two source codes. These included the fact that, as Dr. Pan had written portions of both the Skycope Code and the Bluvec Code, one would expect the idiosyncrasies of the developer to appear in both sets of code. Dr. Smith also attributed some similarities to the fact that the codes are aimed at the same problem of anti-drone defence. Further, the source codes control similar technologies and drone models, which means that some of the algorithms and values will be dictated by the physical aspect of those drones. As well, portions of code taken from the same open source sites would be similar.

[158]   After accounting for all legitimate sources of similarity, Dr. Smith concluded that "at least some of the source code provided by Bluvec was electronically copied from Skycope." In his opinion, certain similarities could not be explained other than by "Bluvec having started with an electronic version of the Skycope source code". In reaching this conclusion, Dr. Smith considered the rapid rate of Bluvec's source code development and the fact that it did not use any version control before 2019 to be significant. Dr. Smith was firm in his conclusions and was not shaken in cross-examination.

[159]   Unlike Dr. Smith, Dr. Gulliver had no background information about the source codes. He did not know they were for anti-drone defence and he did not know that the Bluvec Code he was given was from October 2018, whereas the

Skycope Code was from December 2017. That meant that Dr. Gulliver was unable to consider the faster rate of development of the Bluvec Code.

[160]   Dr. Gulliver adopted what he described as a structural approach. Based on the fact that source code is "typically contained in folders arranged in a tree structure", he described the structure for each set of code. He looked through the folders to find files with similar functionalities. Then, he compared the contents of the files see if there were similarities in the codes. He also selected a large number of files at random and looked to see if there was overlap. This took a great deal of time, as it involved thousands of lines of code. Unlike Dr. Smith, Dr. Gulliver did not examine any files where codes were written in different coding languages.

[161]   Dr. Gulliver identified the fact that both codes are aimed at detecting and attacking drones as a legitimate basis for some similarities. He said that programmers tend to use descriptive file names, and the same name for the same function. He also considered the use of open source code to be a legitimate basis for similarity.

[162]   In Dr. Gulliver's opinion, all of the similarities between the segments of the two source codes he examined could have had legitimate explanations. He also opined that a version control system is unnecessary where only one or two people are actually writing code.

[163]   On cross-examination, Dr. Gulliver agreed that the fact that both source codes use common coding practices did not prove that one was not copied from the other. Importantly, he agreed that if the evidence established that the variables and constants in particular code segments had to have been experimentally derived (that is, they could not have been mathematically calculated), the fact that the Bluvec Code segments contained identical variables and constants to the Skycope Code could not be explained by common coding practices.

[164]   It is very difficult to compare the two experts' initial reports because they approach the task in such different ways. Dr. Smith starts from the premise that the

two source codes are intended to perform similar functions. He identifies a number of similar-looking code segments, disregarding the fact that they may be written in different coding languages, and assesses whether there is any legitimate explanation for the similarity. He provides six examples of Skycope and Bluvec code segments that he says demonstrates copying.

[165]   By contrast, Dr. Gulliver does not know that the source codes are intended to perform similar functions. He compares much larger segments of code by looking at their organizational structure. For example, he notes that that the Skycope Code has three top level folders, whereas the Bluvec Code has six. He disregards all segments of code that are not written in the same coding language. Much of his analysis concerns the number of files and subfolders, and how they are named. He concludes that naming similarities are attributable to common coding practice.

[166]   Both experts produced response reports. Dr. Gulliver's response report emphasizes that Dr. Smith only examined a very small percentage of the two source codes, about 1%. Dr. Smith criticizes Dr. Gulliver's methodology.

[167]   Having reviewed the expert evidence together with that of Dr. Boostanimehr and Dr. Pan, who both testified at length on this issue, Skycope's claim that the defendants copied the Skycope Code rests on acceptance of four propositions. First, the Bluvec Code duplicates unnecessary lines of code found in the Skycope Code. Second, experimentally derived identical numerical values for variables and constants in both source codes cannot be explained other than by copying. Third, the rate of development of the Bluvec Code was too rapid to have occurred independently. Fourth, it would not have been possible for Bluvec to develop its source code without some type of version control system. I consider each in turn.

Unnecessary Code

[168]   Dr. Smith pointed to a segment of Skycope Code in which a "resume" function (that is, directing a piece of hardware to resume what it was doing) was taken from an open source and modified, but was subsequently "commented out". This could have occurred when a Skycope developer initially wanted the resume function but

then decided not to use it. According to Dr. Smith, it is not believable that a Bluvec developer, acting independently, would have inserted the open source code in the same place in the Bluvec Code as in the Skycope Code, decided to modify it in the same way, then decided not to use it, and commented it out in the identical fashion as in the Skycope Code.

[169]   Dr. Smith said that this similarity could not be explained by the same person having written both sets of code at different times:

> Q.   All right. So in your experience is it common that the same individual writing code on different occasions would use similar language or similar methodology?
>
> A.   Not like this, no. So if we look at this and we say, oh, it was written by Mr. Pan at Skycope, then why did he write in the commented out lines when he went to Bluvec? In other words, how did he know to comment out the exact same lines and why did he type those exact same lines when he went from one place to another? It makes no sense at all.

[170]   In Dr. Smith's opinion, the only reasonable explanation for why this part of Bluvec's source code is identical to Skycope's is that Bluvec started with an electronic copy of the Skycope Code.

Experimental or Mathematical Derivation?

[171]   Dr. Smith identified a number of instances where the same numerical values (whether variables or constants) used in the Skycope Code also appear in the Bluvec Code. One such constant is used to set the threshold for avoiding false alarms. Dr. Boostanimehr testified that Skycope determined the value of this constant experimentally as 1.0; however, he said other similar values, such as 0.9 or 1.1 would have worked just as well. Bluvec used the same constant of 1.0.

[172]   A second example concerns the code segment for determining whether two devices are the same drone. The logic block for this function in the Bluvec Code has precisely the same error bounds as in the Skycope segment: 0.02 and 0.98, even though these values are somewhat arbitrary in that similar values (for example, 0.3 and 0.97) would also work.

[173]   A third example concerns "hop time", a function that tracks the time it takes a drone to jump from one radio frequency to another in order to avoid detection. Dr. Boostanimehr testified that this value had to be determined experimentally. It was not available on open source sites. Skycope refined its first estimate of 7.0 to 6.99965 by experimentation that took about a year of research by multiple developers. The Bluvec Code uses the constant 6.99965E-3*, which is another way of writing the same number.

[174]   Dr. Pan testified that he derived all of these constants mathematically when he was developing the Bluvec Code in 2018, and then verified them in the field. He said it took a few days to complete this process. During his testimony, Dr. Pan produced a new document setting out how the constant values in the three examples I have discussed above could be derived mathematically. He said that this document reproduced the calculations he had done in 2018. No document containing those calculations had been disclosed.

Rate of Development

[175]   It took Skycope approximately 17 months from its date of incorporation to the end of December 2017 to develop the Skycope Technology to the point where it could detect, classify and identify about ten drone models, including the DJI Phantom 4 model, defend against some of them, and distinguish friendly from unfriendly drones. Mr. Jia acknowledged that Skycope's development rate was "rapid".

[176]   Bluvec rate of development was even faster. It was able to detect and take control of four drones[5], including a DJI Phantom 4 drone within six months of its incorporation, as it demonstrated to Mr. Gagnon on August 30, 2018.

Version Control

[177]   Version control can be as simple as saving drafts of a written document on one's computer, and tracking these drafts by date. Factors such as multiple authors

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[5] Mr. Jia testified that Bluvec could detect and take control of three drone models in August 2018, and added to them when they became aware of Mr. Gagnon's interest.

and the value of the information in the document create the need for more sophisticated version control programs.

[178]   Skycope started using GitHub as its version control system early in its development process. It appears that Bluvec had no version control system prior to 2019. Bluvec did not disclose any documents relating to the version control history of the Bluvec Code, whether maintained through a third-party product such as GitHub or internally. There is virtually no documentary evidence about the development process for the Bluvec Code.

[179]   Dr. Smith and Dr. Gulliver had different opinions about the need for a version control system when developing source code complex enough to detect and defend against drones. In Dr. Smith's view, version control is essential because the code is a start-up tech company's most valuable asset. This is true regardless of how many or few developers are writing code.

[180]   Dr. Gulliver opined that a version control system is not necessary when only one or two people are writing code, or people are working on very discrete parts of a complex code. Dr. Pan said he wrote most of the Bluvec Code. Mr. Jia testified that initially only three or four people were writing code and each had their own project, but did not provide specifics.

Other Information on Development of Skycope Code

[181]   Skycope's development of direction-finding technology also bears on the issue of misuse. There was a lot of market demand for this function. As minutes from Skycope team meetings show, Skycope was actively researching this issue and had made progress on it at the time of Mr. Jia's termination in December 2017.

[182]   The defendants' submissions characterize the Bluvec Code as "rudimentary" and say it did not use anything other than technology that was commonly known in the industry. However, Dr. Pan admitted that, while he was still working at Skycope, he wrote direction-finding code for Mr. Jia that later became part of the Bluvec Code. Bluvec subsequently sold that direction-finding technology to Lizheng for $800,000.

Conclusion on Misuse of Skycope Information

[183]   I rely on Dr. Smith's expert opinion that the only reasonable explanation for the similarities between the segments of Skycope and Bluvec source code he analysed is that Bluvec used an electronic copy of the Skycope Code. The fact that he examined only a tiny percentage of the two source codes does not detract from this. Any accepted evidence of copying can establish misuse; it is not necessary for the plaintiff to prove that all of the Skycope Code was copied. Similarly, the fact that Dr. Boostanimehr suggested segments of code to examine does not call into question Dr. Smith's independent assessment of whether they were copied.

[184]   I consider Dr. Smith's methodology more useful in the context of this case than that used by Dr. Gulliver. While Dr. Gulliver examined much more code than did Dr. Smith, he did not compare any segments written in different programming languages. This means he did not look at most of the examples identified by Dr. Smith. He did not have any of the information to which Dr. Smith had access and, perhaps as a result of this, his focus was far more on file structure than on content.

[185]   The striking absence of evidence on the Bluvec Code development process, including the absence of evidence of a version control system during the comparatively short period over which it became capable of detecting and disabling a DJI Phantom 4 drone, also supports the conclusion that that the defendants misused the Skycope Code. Bluvec's development of direction-finding technology is a significant example of misuse. Dr. Pan wrote direction-finding code for Skycope during his notice period and also used it in the Bluvec Code.

Was there Detriment to Skycope?

[186]   The plaintiff did not address proof of detriment in its closing submissions. Unlike *Cadbury*, there was no agreement in this case that evidence about the plaintiff's losses would be deferred such that evidence of detriment was unnecessary: para. 54. In their closing submissions, the defendants submit that Skycope has not proved detriment.

[187]   Mr. Liu testified that the individual defendants' departures from Skycope adversely affected Skycope's timeline for its product development. However, that is not a harm attributable to misuse of confidential information.

[188]   Skycope submits that it and its parent companies have suffered detriment by being forced into extensive litigation in China and that Bluvec and Lizheng's entry into the market has harmed Skycope and Shengkong's market position in China. Detriment to Skycope cannot be established by pointing to its parent, a separate entity that is not a party to this action. I do not have evidence about who the parties to the Chinese litigation are, nor about whether Skycope has been "forced" into it. I have no evidence about whether and how the companies in this litigation are competing in China. These submissions do not establish detriment.

[189]   That said, proof of detriment does not require a plaintiff to quantify its losses in monetary terms; it is a broad concept that includes non-monetary harms or disadvantages: *Cadbury* at para. 53, citing *Lac Minerals*. The evidence shows that the defendants were able to bring the Bluvec anti-drone product to market and to compete with Skycope (at least with respect to the DJI Phantom 4 drone) faster than would have been possible had they developed the Bluvec Code independently. This "springboard" advantage (see *GEA* at para. 135) is sufficient proof of detriment to the plaintiff for the purposes of the breach of confidence analysis.

[190]   I conclude that the plaintiff has established misuse of the Skycope Code to Skycope's detriment.

Contractual Breach of Confidence Claims

[191]   The employment contracts the individual defendants signed with Skycope contain identical confidentiality clauses. In each, confidential information is defined very broadly to include any information relating to Skycope, except information listed under subsections (a) to (c):

> **Confidential Information**
>
> In this Agreement, "Confidential Information" <u>means any and all information in any form</u> (whether written, electronic, graphic or otherwise) <u>relating to the</u>

business, affairs, property, assets or undertaking of the Company and/or its subsidiaries, parent companies, holding companies, affiliates, licensors, customers, clients, suppliers, consultants, partners, or persons who have supplied information on a confidential basis to the Company, including, without limitation, information relating to IP rights (as defined in paragraph 18(a)(i)); Technology and Works (as defined in paragraph 18(a)(ii)); Work Product (as defined in paragraph 18(a)(iii)); customer, client, consultant and supplier lists; … business plans; personnel, including… terms and conditions of employment; … products; services; contracts; marketing plans and strategies;… and any information from which the Company and… Shengkong… derives economic value or the disclosure of which could cause harm to the Company or Shengkong, provided that "Confidential Information" will not include:

> a) information that is lawfully and generally available to the public other than as a result of disclosure, fault or negligence of the Employee;
>
> b) information the Employee can establish by written records was in the Employee's possession prior to the Employee's employment by the Company and was not subject to any obligation of confidentiality; and
>
> c) information the Employee can establish by written records was received without obligation of confidentiality from a third party who did not acquire or hold such information under any obligation of confidentiality.

[Emphasis added.]

[192]   The contractual confidentiality obligation prohibits each employee from using or disclosing any confidential information, other than as required by their work for Skycope, during their period of employment and "at all times thereafter".

[193]   Neither party's submissions address what information is covered by the exceptions. I am satisfied on the evidence that the plaintiff has proved that the exclusions do not apply to the Skycope Code, patent applications, and marketing research. That means that, if Skycope proves that an individual defendant used this information other than as required by their employment, they have breached the contractual confidentiality clause in their employment contracts with Skycope. I will discuss this below, when addressing the liability of each individual defendant.

BREACH OF FIDUCIARY OBLIGATIONS BY MR. JIA

[194]   The plaintiff claims that Mr. Jia was a fiduciary of Skycope and breached his fiduciary obligations by 1) unfairly competing with Skycope through Bluvec and

Lizheng, 2) using Skycope's confidential information for his own benefit and to benefit Bluvec and Lizheng, and 3) soliciting Skycope's employees to work for Bluvec.

[195]   The defendants deny that Mr. Jia was a fiduciary of Skycope or, if he was, that he breached his fiduciary duties.

Was Mr. Jia a Fiduciary of Skycope?

[196]   Determining whether a fiduciary relationship exists is a question of fact that depends on the circumstances of the particular relationship: *Lac Minerals* at 648.

[197]   Fiduciary relationships typically have three characteristics:

> (1)   The fiduciary has scope for the exercise of some discretion or power.
>
> (2)   The fiduciary can unilaterally exercise that power or discretion so as to affect the beneficiary's legal or practical interests.
>
> (3)   The beneficiary is peculiarly vulnerable to or at the mercy of the fiduciary holding the discretion or power.
>
> *Lac Minerals* at 646, citing *Frame v. Smith*, [1987] 2 S.C.R. 99 at 136, 1987 CanLII 74.

[198]   Among other things, a claimant must also show an express or implied undertaking by the fiduciary to act in the best interest of the beneficiary: *Alberta v. Elder Advocates of Alberta Society*, 2011 SCC 24 at para. 30.

[199]   In the employment context, the non-exhaustive list of factors set out in *GasTOPS Ltd. v. Forsyth*, [2009] O.J. No. 3969 (S.C.J.), 2009 CanLII 66153 at para. 85 [*GasTOPS*], aff'd 2012 ONCA 134 is frequently cited:

> [85]   The jurisprudence has imposed fiduciary obligations on employees in a number of different factual circumstances and in so doing have considered:
>
> > (a) whether the employee has scope for the exercise of some discretion or power, the employee can unilaterally exercise that power or discretion so as to effect the [beneficiary's] legal or practical interest and whether the beneficiary is vulnerable to or at the mercy of the fiduciary holding the discretion or power;
> >
> > (b) knowledge of customer contact information, needs and preferences, and therefore, an ability to influence customers. ...

(c) knowledge of the business and market opportunity of the employer or playing a role in the employer's strategic market development is a consideration in determining if the employees owed a fiduciary duty to the former employer. ...

(d) knowledge of and access to confidential information. It is not necessary for an employee to have access to corporate financial information to be found to be a fiduciary. It is the employee's access to information of which disclosure would make the employer vulnerable. In a sales environment, customer information is critical or in a technological environment, product specifications are critical. ...

(e) direct and trusted relationships with existing and potential customers, particularly where there is a "unique relationship with the [clients'] personnel contacts and [the defendants] had direct access to confidential information as to the clients' needs, preferences and accepted rates": see *Quantum Management Services Ltd. v. Hann et al.*, [1996] O.J. No. 5382;

(f) whether or not the employee's functions are essential to the employer's business, therefore rendering the employer vulnerable to the employee's departure: see J. Thorburn and K. Fairbairn, *Law of Confidential Business Information*, looseleaf, (Aurora, Ontario: Canada Law Book, 1998) at 4:5200 at 4-26.

[200]   Based on Mr. Jia's own evidence, which is against his interest in relation to this issue, I have little difficulty concluding that Mr. Jia was a fiduciary of Skycope.

[201]   Mr. Jia testified that he was instrumental in developing the concept for the Skycope Technology even before the company was incorporated. He was a co-founder of Skycope and was responsible for building and leading the technical team developing the Skycope Technology. He was second in command after Mr. Liu. Although Mr. Liu was primarily involved on the business side, Mr. Jia travelled to China in November 2017 to solicit a potential customer and he took part in some fundraising activities. Mr. Jia's evidence was that hiring decisions were made jointly between him and Mr. Liu. When Mr. Liu was in China, as he was for most of 2017, Mr. Jia was in charge in Vancouver.

[202]   Other evidence supports the conclusion that Mr. Jia was essential to Skycope. In a September 2016 WeChat message to Mr. Jia encouraging him to leave Fortinet for Skycope, Mr. Liu wrote, "You are a matter of life and death to the company, but not to Fortinet." Mr. Jia also had a substantial equity interest in Shengkong, Skycope's parent company.

[203]   Mr. Jia had full access to the Skycope Code.

[204]   Based on this evidence, I find that Skycope was vulnerable to Mr. Jia. He was indispensable to the company and its success because he led the team in charge of creating its most valuable asset to which he had unfettered access. That gave him the power to make decisions affecting Skycope's economic success. He also played some role in soliciting customers for Skycope.

Did Mr. Jia Breach his Fiduciary Obligations?

[205]   Former employees who are also fiduciaries may not make use of confidential information to compete with their former employer, and may not solicit their former employer's clients for a reasonable period of time: *Barton Insurance Brokers Ltd. v. Irwin et al.*, 1999 BCCA 73 at para. 18; *GasTOPS* at para.112; *Imperial Sheet Metal* at para. 43.

[206]   I have found that Mr. Jia used the Skycope Code to develop and market competing wireless anti-drone technology through Bluvec. In August 30, 2018, Bluvec employees demonstrated the Bluvec Technology's anti-drone capabilities to Mr. Gagnon, using a DJI Phantom 4 drone at Adanac Park. Bluvec quoted Mr. Gagnon a price for its anti-drone product, which Mr. Jia described as using Bluvec Technology with Lizheng hardware.

[207]   I find that Mr. Jia breached his fiduciary obligation to Skycope by using its confidential information to compete with it.

[208]   Skycope also claims that Mr. Jia breached his fiduciary obligations by using Lizheng to compete with Skycope. Mr. Jia described Bluvec as Lizheng's sales agent in Vancouver and Bluvec as Lizheng's biggest customer. The key evidence that Mr. Jia was competing with Skycope through Lizheng consists of the Blue Origin business plan, listing Mr. Jia along with Mr. Lei, Lizheng's CEO, as co-founders of Blue Origin, and the Entrusted Shareholder Agreements, which show other individuals holding shares in Lizheng in trust for Mr. Jia. Mr Jia claimed that Mr. Lei

used his name in the Blue Origin business plan without his consent and forged his signature on the Entrusted Shareholder Agreements. These claims are not credible.

[209]   Lizheng's marketing material includes a photograph from May 2018, depicting a demonstration in China of what is presented as Lizheng's product. Along with Mr. Lei, Mr. Jia and Mr. Zhang are in the photograph. Mr. Jia said that he was merely observing the demonstration. However, he admitted that Mr. Zhang was conducting the demonstration because Lizheng was using Bluvec's software. Finally, the evidence shows that some of Lizheng's online job postings list the person to contact as a person named "Jack," (which is also Mr. Jia's name) who is described as VP of Lizheng. One such posting, for the position of software engineer, described the job as including an "opportunity to immigrate and live in Vancouver." Bluvec is based in Vancouver; Lizheng is based in China.

[210]   I do not accept Mr. Jia's evidence that the relationship between Bluvec and Lizheng is simply one of agency. In addition to the activities described above, Mr. Zhang testified about how closely he worked with Lizheng at Mr. Jia's direction when he went to China in May 2018. This included pretending to be a Lizheng employee when conducting the May 2018 demonstration of what was presented as Lizheng's direction-finding technology.

[211]   Based on this evidence, I find that Mr. Jia also competed with Skycope through Lizheng in breach of his fiduciary obligations.

[212]   The evidence does not establish that Mr. Jia solicited Skycope's clients because Skycope tendered no evidence of who its clients are.

[213]   Fiduciaries may not actively solicit other employees of the former employer: *GasTOPS* at paras. 115-116.

[214]   There is no evidence that Mr. Jia "actively solicited" any Skycope employee. Mr. Li, Mr. Zhang and Mr. Zhuang all testified that they contacted Mr. Jia after they had left Skycope. Mr. Wu testified that Mr. Jia contacted him, but this occurred some months after he had left Skycope.

[215]   I have found that Dr. Pan was working with Mr. Jia while he was still employed by Skycope. However, there is no reliable evidence that Mr. Jia actively persuaded him to do so. It is equally possible that Dr. Pan approached Mr. Jia.

[216]   I conclude that Mr. Jia breached his fiduciary obligations to Skycope by using its confidential information to compete with it through Bluvec and Lizheng, but not by soliciting Skycope clients or employees.

ENFORCEABILITY OF NON-COMPETITION CLAUSE

[217]   In *IRIS The Visual Group Western Canada Inc. v. Park,* 2017 BCCA 301 [*IRIS*], the Court of Appeal affirmed that non-competition clauses are restrictive covenants and presumptively unenforceable:

> [16]   A covenant not to compete is a restraint of trade and presumptively unenforceable. However a restraint of trade will be enforceable if it is reasonable as between the parties and with reference to the public interest: *Elsley v. J.G. Collins Insurance Agencies*, [1978] 2 S.C.R. 916 at 923-924.
>
> [17]   Where the enforceability of a non-competition clause is put in issue, the burden to establish that it is reasonable as between the parties is on the party seeking to enforce the clause. If the clause meets that requirement, the burden of establishing that the clause is unreasonable by reference to the public interest falls on the party resisting enforcement: *Green v. Stanton* (1969), 6 D.L.R. (3d) 680 (B.C.C.A.).

[218]   The power imbalance between employers and would-be employees means that non-compete clauses in employment contracts attract a high degree of scrutiny: *IRIS* at para. 22. The party seeking to uphold the clause must show (1) that it has a proprietary interest worthy of protection; (2) that interest cannot be adequately protected by other less restrictive measures; and (3) that its terms are reasonable by reference to the activity prohibited, the geographical area of the prohibition and the duration of the prohibition: *IRIS* at para. 25.

[219]   The non-competition clause in the Skycope contracts provide:

> During the Term and for a period of 12 months after the termination of the Employee's employment with the Company for any reason, the Employee will not, without the Company's prior written consent, which may be withheld in the Company's sole discretion, directly or indirectly, whether as an employee, partner, principal, agent, consultant, shareholder, lender, guarantor or otherwise, engage in any undertaking or business in North America or Asia

that, in competition with the Company, develops, manufactures or markets drone defending or IOT security solutions.

[220]   The defendants concede that Skycope has a proprietary interest worth protecting, at least with respect to the Skycope Code. However, even assuming that no less restrictive measures adequately protect Skycope's interest, I find that the terms of the Skycope's non-competition clause are overbroad and unreasonable, both with respect to activities and geographical area.

[221]   The scope of restrictions in a non-compete clause must be tailored to the plaintiff's scope of operations: *Ceridian Dayforce Corporation v. Daniel Wright*, 2017 ONSC 6763 at para. 42.

[222]   There is no evidence that Skycope developed or marketed anything other than wireless anti-drone defence products. Prohibiting former employees from working in the much broader field of IOT security solutions is obviously overbroad. Similarly, there is no evidence that Skycope (including its parent, Shengkong) operates outside of Canada and China. This makes the geographic restriction overbroad as well.

[223]   The plaintiff submits that, if the non-compete clause is overbroad, the court should read it down. In *Shafron v. KRG Insurance Brokers (Western) Inc.*, 2009 SCC 6 at paras. 29-30, the Supreme Court of Canada distinguished between "blue pencil" severance (where the offending portion of a clause is simply struck out) and "notional" severance (where the contractual language is changed to make the clause enforceable). Justice Rothstein held that notional severance is not available to cure overbroad restrictive covenants in employment contracts: para. 42.

[224]   Reading down the geographic restriction in the Skycope contracts' non-competition clause would require notional severance. I conclude that the clause is unenforceable.

LIABILITY OF EACH DEFENDANT

[225]   In this section, I determine the liability of each defendant for each of the claims Skycope has advanced against them.

Liability of Mr. Jia

[226]   Skycope claims that Mr. Jia breached his contractual and common law duties of confidentiality, the non-competition and non-solicitation clauses of his employment contract with Skycope, and his obligations as Skycope's fiduciary.

[227]   Skycope has proved on a balance of probabilities that Mr. Jia misused the Skycope Code to the detriment of Skycope, in breach of the common law duty of confidentiality and of the implied term of confidentiality in the Oral Contract.

[228]   Mr. Jia had full access to the Skycope Code while employed by Skycope. He had a copy of it on his laptop that he failed to return. I do not accept his uncorroborated testimony that Mr. Ghasemzadeh, a Skycope employee, gave him permission to take the laptop, and I decline to draw an adverse inference from the fact that the plaintiff did not call Mr. Ghasemzadeh as a witness. I also reject Mr. Jia's testimony that he never accessed the Skycope Code on his laptop after his termination and that the information was wiped when he reformatted the hard drive.

[229]   I find that Mr. Jia intended to compete with Skycope and he used Bluvec and Lizheng as a vehicle to do so. While he may have contemplated developing other types of wireless security technologies, his primary aim and the focus of his work was to market a wireless anti-drone product that would successfully compete with Skycope's product. Mr. Jia breached his common law and contractual obligations of confidentiality to Skycope.

[230]   I have found that Mr. Jia was Skycope's fiduciary. He also breached his fiduciary duties by using the Skycope Code to compete with Skycope through Bluvec and Lizheng. He did not breach his fiduciary duty of non-solicitation.

[231]   As the Written Contract is not enforceable, Mr. Jia did not breach its non-competition and non-solicitation clauses.

Liability of Dr. Pan

[232]   Skycope claims that Dr. Pan breached his contractual and common law duties of confidence to Skycope and the non-competition clause of his employment agreement with Skycope.

[233]   As I have explained, Dr. Pan's reasons for resigning were unconvincing. While he was still working at Skycope during his notice period, he admitted that he was actively assisting Mr. Jia in developing anti-drone technology that would become the Bluvec Code, including by writing direction-finding code for Skycope that he then used in writing the Bluvec Code. This establishes breach of his contractual and common law confidentiality obligations.

[234]   Skycope submits that Dr. Pan also breached his confidentiality obligations to Skycope with respect to patent applications. While at Skycope, Dr. Pan drafted patent applications that were filed with the Chinese patent office through Shengkong on March 12 and 13, 2018, respectively. They were for "a low-altitude drone cluster intervention method" (being Skycope's intelligent jamming technology) and for "a wireless signal detection method and system" (being Skycope's broadband detection algorithm). On August 10, 2018, Lizheng filed two patent applications in the Chinese patent office that are strikingly similar, both in content and in text, to those Dr. Pan drafted for Skycope, and that Dr. Pan is listed in each of these patent applications as the inventor.

[235]   However, the only evidence I have of when the Skycope/Shengkong patent applications became public is Mr. Liu's unsupported testimony that the Lizheng applications were filed before that date.

[236]   Skycope relies on a Civil Settlement Agreement reached in a proceeding before the Beijing Intellectual Property Court. Shengkong and Lizheng are listed as parties and Dr. Pan is listed as a third party. The consent order accepts that Shengkong owns the patents. In an affidavit on this issue, Dr. Pan says he was entirely unaware of this litigation.

[237]   While I have found that Dr. Pan is not a credible witness, the Civil Settlement Agreement is a mediated resolution. It is not a judicial finding that Dr. Pan misused Skycope's confidential information in relation to patent applications.

[238]   As there is no evidence corroborating Mr. Liu's statement that the Lizheng patent applications were filed before the information in the Shengkong patent applications became public, Skycope has not proved that Dr. Pan breached his confidentiality obligations to Skycope in this respect.

[239]   There is no evidence that Dr. Pan conducted or used market research for Skycope or Bluvec.

[240]   I conclude that Dr. Pan breached his common law and contractual confidentiality obligations by misusing the Skycope Code. He did not breach the non-competition clause of his employment contract because it is unenforceable.

Liability of Mr. Wu

[241]   Skycope claims that Mr. Wu breached his contractual and common law duties of confidence to Skycope and the non-competition clause of his employment agreement with Skycope.

[242]   The evidence establishes that Mr. Wu worked on both the Skycope Code and the Bluvec Code. It is therefore possible that he was aware that the Bluvec Code contained parts of the Skycope Code. However, Skycope has only proved that a small percentage of the Skycope Code was used in the Bluvec Code. Absent evidence that Mr. Wu worked on those parts of the Bluvec Code taken from Skycope, Skycope has not proved that Mr. Wu knowingly misused Skycope's confidential information.

[243]   There is no evidence that Mr. Wu worked on or used market research at Skycope or Bluvec.

[244]   I conclude that Mr. Wu is not liable to Skycope for breach of confidentiality at common law or under his contract. The non-competition clause in his employment contract is unenforceable.

Liability of Mr. Zhang

[245]   Skycope claims that Mr. Zhang breached his contractual and common law duties of confidence to Skycope and the non-competition clause of his employment agreement with Skycope.

[246]   Mr. Zhang did not have access to the Skycope Code during his employment at Skycope. While Bluvec employed him as a software engineer, he was not asked at trial about what source code he wrote for Bluvec or whether he did any market research. There is no evidence that Mr. Zhang knowingly misused Skycope's confidential information.

[247]   The non-competition clause of Mr. Zhang's employment contract is unenforceable.

[248]   I conclude that Mr. Zhang is not liable to Skycope.

Liability of Mr. Zhuang

[249]   For the same reasons that I have given for Mr. Zhang, I conclude that Mr. Zhuang is not liable to Skycope.

Liability of Mr. Li

[250]   Skycope makes the same claims against Mr. Li. While he had access to the Bluvec Code while employed there, his evidence was that he spent the first six months learning the programming languages Bluvec used, and only began writing the Bluvec Code in early 2019. As with Mr. Wu, there is no evidence that Mr. Li worked on any part of the Bluvec Code derived from the Skycope Code. There is no evidence he was involved in patent applications or market research. As with the other individual defendants, the non-competition clause of his employment agreement with Skycope is unenforceable.

[251]   I conclude that Mr. Li is not liable to Skycope.

Liability of Bluvec

[252]   Skycope claims that Bluvec breached the common law duty of confidence by knowingly receiving and misusing Skycope's confidential information. I am satisfied that Skycope has proved this claim. In *Service Corp. International (Canada) Ltd. v. Nunes-Pottinger Funeral Service & Crematorium Ltd.,* 2012 BCSC 586, Justice N. Smith found the defendant company, Nunes-Pottinger Funeral Services & Crematorium Ltd., liable because it benefited from confidential information taken by the individual defendants from their former employer:

> 37   I find that Messrs. Nunes and Pottinger were in clear breach of their duty not to misuse confidential information obtained from their former employer. When a new employer benefits from the misuse of confidential information, that new employer is also liable for the former employer's losses, even if it had no direct knowledge of the employees' breach of duty: *Clayburn Industries Ltd. v. Piper* (1998), 62 B.C.L.R. (3d) 24 (S.C.). The case for liability of the new employer, NP, is particularly strong here because Mr. Nunes and Mr. Pottinger were not merely new employees, but the directing minds of NP, which clearly benefited from the transfer of business.

[253]   That reasoning applies equally in this case. Mr. Jia is the directing mind of Bluvec. I conclude that Bluvec is liable to Skycope on this basis.

MR. JIA'S COUNTERCLAIMS

[254]   Mr. Jia counterclaims against Skycope, saying that it breached the Oral Contract because it failed to issue him shares representing 30% ownership of Skycope. He also seeks lost wages for overtime and unpaid work in the amount of $100,000; damages for wrongful termination, and repayment of the $10,167.06 he loaned it.

[255]   I have found that the Oral Contract provided that Mr. Jia would have a 30% equity interest in Skycope.

[256]   Skycope argues that Mr. Jia agreed to take an equity interest in Shengkong instead of Skycope, after Shengkong became the sole owner of Skycope through

the Shengkong Investment Agreement in July 2017. That agreement records Mr. Jia as acquiring a 18.73% interest in Shengkong.

[257]   However, the Arbitration Decision, discussed above in relation to Mr. Jia's lack of credibility, is of assistance to him on this point. The tribunal found that he paid approximately $400,000 CAD for his 18.73% interest in Shengkong. This means that Mr. Jia's equity interest under the Oral Contract did not become his equity interest in Shengkong.[6]

[258]   I find that Mr. Jia is entitled to a 30% interest in Skycope.

[259]   Mr. Jia seeks payment for "all unpaid hours and wages from August 2016 to present" based on the doctrine of *quantum meruit*. There is no evidentiary basis for the *quantum meruit* claim because Mr. Jia did not provide any admissible evidence that he worked hours for which he was not paid. Accordingly, this counterclaim is dismissed.

[260]   Mr. Jia also says that his employment was wrongfully terminated and seeks damages at common law for a reasonable notice period, which he says is six to nine months. There is no evidence that the Oral Contract included a "reasonable notice" termination provision. Under the *Employment Standards Act*, R.S.B.C. 1996, c. 113 Mr. Jia is entitled to $2,307.69 in lieu of two weeks' notice. As discussed, Skycope offered to pay this amount to Mr. Jia.

[261]   Mr. Liu's termination letter to Mr. Jia expressly acknowledges that Mr. Jia loaned Skycope $10,167.06 and offers to repay it. I find that Skycope owes Mr. Jia this amount.

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[6] Contrary to the plaintiff's submission, I do not read the warranty in the Shengkong Investment Agreement as saying that Mr. Jia acknowledges he never had an equity interest in Skycope. Mr. Liu gave the same warranty and he certainly owned shares in Skycope.

REMEDIES

Claim

[262]   In its submissions[7], Skycope seeks the following remedies:

a) a declaration that the defendants have breached their employment agreements;

b) a declaration that the defendants have breached the temporary injunction;

c) a permanent injunction;

d) an accounting, with the right to elect between disgorgement of profits and damages once an accounting is complete;

e) in the alternative to an accounting, general damages for breach of contract, breach of confidence and breach of fiduciary duty;

f) punitive damages; and

g) legal fees on a full indemnity basis.

[263]   As I have found that Mr. Li, Mr. Wu, Mr. Zhang and Mr. Zhuang are not liable to Skycope, my analysis of remedies applies only to the remaining defendants: Mr. Jia, Dr. Pan, and Bluvec.

Declaratory Relief

[264]   Skycope is entitled to a declaration that Mr. Jia breached his Oral Contract and that Dr. Pan breached his employment agreement.

[265]   The evidence establishes that the defendants Mr. Jia, Dr. Pan and Bluvec breached the interlocutory injunction issued by this court on October 24, 2018. Skycope is entitled to a declaration to that effect.

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[7]In its pleading, Skycope also sought return of its confidential information and aggravated damages. Since it did not address these remedies in its closing submissions, I assume it has abandoned them.

Permanent Injunction

[266]   A permanent injunction is an extraordinary remedy. In breach of confidence cases, the court must balance the interests of the plaintiff with those of the defendants and of the public in healthy competition: *Expert Travel Financial Security (E.T.F.S.) Inc. v. BMS Harris & Dixon Insurance Brokers Ltd.*, 2005 BCCA 5 at para. 81.

[267]   The springboard period has expired. There is no evidence that the advantage the defendants gained continues. A permanent injunction is not warranted in this case.

Accounting

[268]   An account of profits is an equitable remedy that may be ordered as an alternative to damages. The objective is to deprive a defendant of their wrongfully gained profits, irrespective of whether the plaintiff actually suffered a loss.

[269]   As noted in *GEA* at para. 134, a variety of remedies are available for breach of confidence. Where the exact amount of the gain is unclear, the court may order necessary data to be brought before it: Mark Vincent Ellis, *Fiduciary Duties in Canada* (Toronto: Thomson Reuters) (looseleaf updated 2022) at 26:9. In breach of confidence cases, the court enjoys considerable flexibility in determining the appropriate order: *GEA* at para. 143.

[270]   Skycope argues that it has not been able to elect the most appropriate remedy because the defendants have "obscured their theft of confidential information and have made inadequate document disclosure." It relies on *Equustek Solutions Inc. v Jack*, 2020 BCSC 793 and *Ruwenzori Enterprises Ltd. v. Walji*, 2004 BCSC 741 as cases where an accounting was ordered because the defendant's conduct meant there was insufficient evidence before the court to award damages.

[271]   However, in both of those cases the plaintiffs made extensive efforts to discover documents in the defendants' possession. In *Ruwenzori*, the plaintiffs went to the extent of seeking document production in a foreign jurisdiction. In *Equustek,*

the court described the defendants as "scheming" to avoid document disclosure and noted that some had left the jurisdiction.

[272]   Skycope has failed to take advantage of the processes available to it to obtain disclosure from the defendants. Unlike the defendants in *Equustek*, the Skycope defendants are in this jurisdiction and they participated in the proceedings. Skycope's counsel confirmed that Skycope did not apply for an order for document production from any of the defendants.

[273]   Further, Skycope did not lead expert evidence to estimate Bluvec's likely profits, as was done in *Equustek*. It was open to Skycope to obtain such evidence by, for example, providing its expert with information about the prices of its own nearly-identical products.

[274]   Having failed to make appropriate efforts to put evidence of its damages before the court, Skycope is now effectively seeking post-trial discovery. These circumstances do not support an accounting award. I decline to grant it.

General Damages

[275]   *XY, LLC v. Canadian Topsires Selection Inc.*, 2016 BCSC 1095 [*Canadian Topsires*] succinctly summarizes damages principles in intellectual property cases:

> [285]   The overall objective in assessing damages (or profits) in intellectual property cases is to find a broadly equitable result. It "must always be more or less a matter of estimate, because it is impossible to ascertain, with arithmetical precision, what, in the ordinary course of business, would have been the amount of the [plaintiffs'] sales and profits": see *Cadbury Schweppes Inc.* at para. 99, citing *United Horse-Shoe and Nail Co. v. Stewart* (1888), 13 App. Cas. 401 (H.L.). The tribunal must do "the best it can": *Cadbury Schweppes Inc.* at para. 99, citing *Wood v. Grand Valley Railway Co.* (1915), 1915 CanLII 574 (SCC), 51 S.C.R. 283 at 289.
>
> [286]   If a plaintiff establishes that a loss has been suffered, the difficulty of determining the amount does not excuse the wrongdoer from paying damages or disgorging its profits. Damages are to be assessed by the court, not calculated, based on facts that were within the plaintiff's power to prove, and upon which the court may make a fair and reasonable estimate of damages: *Encorp Pacific (Canada) v. Rocky Mountain Return Center Ltd.*, 2008 BCSC 779 at paras. 129-130.

[276]   That said, a damages award must be anchored to the evidence: *Jostens Canada Ltd. v. Gibsons Studio Ltd.*, 1999 BCCA 273 at para. 19.

[277]   For the reasons set out above in relation to the accounting remedy Skycope seeks, I decline to draw an adverse inference against the defendants for failing to produce records relevant to the damages calculation. This is not a situation like *Canadian Topsires*, where the defendants made it "impossible" to determine the scope of their operations: paras. 294, 298. Rather, Skycope failed to take the steps available to it to compel the defendants to produce the relevant records.

[278]   Skycope does not quantify the amount of general damages it seeks, nor does it distinguish between the various defendants. Instead, it sets out five "facts" that it asks me to consider in awarding a global amount:

   a)   the costs it incurred in finding employees to replace the defendants, particularly Mr. Jia and Dr. Pan, which it quantifies as $41,666, based on a four-month time period and their individual salaries;

   b)   the savings the defendants achieved by misusing Skycope's confidential information, based on all of Skycope's expenses from Skycope's inception to May 31, 2018, approximately one month after the last defendant's departure, which it quantifies as $1,654,480 based on an unaudited financial statement showing Skycope's 2017 and 2018 expenses;

   c)   the value of sales by Lizheng in China of Bluvec's product, which it quantifies at $200,000 per unit for 200 units (that is, $40,000,000), based on the price quoted to Mr. Gagnon, and Mr. Lei's interview for a magazine article in China;

   d)   the decrease in value of Shengkong of about $7,000,000 when Lizheng entered the Chinese market selling a product that was based on misuse of Skycope's confidential information; and

e)   the value of the technology Bluvec sold to Lizheng, consisting of $800,000 that Lizheng paid Bluvec to develop the "direction-finding function" and another $800,000 for developing "anti-drone hardware".

[279]   Skycope's claim for the cost of replacing Mr. Jia and Dr. Pan is irrelevant to the liability of these defendants. The wrong they did to Skycope was to take the Skycope Code to compete against it, in breach of their duties of confidence and of Mr. Jia's fiduciary duty. Skycope terminated Mr. Jia's employment and Dr. Pan resigned. Skycope would have had to replace Mr. Jia and Dr. Pan regardless of whether they breached their duties to it.

[280]   The savings the defendants achieved by using Skycope's confidential information, measured by the expenses Skycope incurred in developing the Skycope Code, might help to quantify damages in that the defendants did not incur the costs that would have been associated with developing the Bluvec Code independently. However, Skycope's estimate of $1,654,480 based on unaudited financial statements does not represent those savings. Skycope's expenses from its inception to the end of May 2018 relate to its whole operation, not just development of the Skycope Code. Any attempt on my part to allocate a portion of that amount to development of the Skycope Code would be speculative.

[281]   The evidence of the number of Lizheng's sales of its anti-drone product is manifestly unreliable. That number comes from a magazine article about anti-drone technology in China, dated July 30, 2020, in which Lizheng is estimated to have agreements to sell 200 anti-drone products based on a statement by Mr. Lei. As Skycope acknowledges, there is no evidence that Bluvec sold any anti-drone products. The only evidence is that it quoted $200,000 per unit to Mr. Gagnon in August 2018.

[282]   The alleged decrease in value of Shengkong, which is not a party to this litigation, cannot establish the loss to Skycope. In any event, Skycope has not tendered any evidence to corroborate Mr. Liu's assertion that Shengkong lost value when Lizheng's anti-drone product entered the Chinese market.

[283]   In May 2018 and April 2019, Bluvec contracted with Lizheng to develop technologies described respectively as a "6-antenna module to position radio signal source" and a "High-Gain Low-Noise Radio Signal Amplifier" for $800,000 each. Skycope submits that these technologies were based on the Skycope Code. The defendants do not address this issue.

[284]   The first of these technologies is direction-finding function based on the MUSIC algorithm. The evidence establishes that Skycope was developing this function, and that it was confidential information contained in the Skycope Code. By contrast, Skycope has not pointed to evidence that the Skycope Code contained confidential information about the second technology, relating to signal amplification.

[285]   Stepping back from Skycope's submissions, what it lost as a result of the defendants' wrongdoing was its competitive advantage. The evidence shows that Bluvec was able to bring its product to market faster than it could have without the head start it got from using the Skycope Code.

[286]   The "springboard doctrine" recognizes this kind of damage: *GEA* at para. 135. Where a defendant has had a head start by misusing a plaintiff's confidential information, the court will determine the "springboard period". That period commences when the defendant started misusing the confidential information in a way that was capable of harming the plaintiff and ends when the defendant would have been able to compete with the plaintiff without that unfair advantage: *GEA* at paras. 136, 149. The court has wide discretion to craft an appropriate remedy: *GEA* at para. 161.

[287]   It took Bluvec about six months to develop its product to a point that it could detect and jam four drone models, whereas it took Skycope about 17 months to decode and jam ten drone models. Based on the evidence, including the experts' comparison of the Skcope Code as of the end of December 2017 and the Bluvec Code as of October 2018, I find that Bluvec's misuse of the Skycope Code gave it a head start of nine months.

[288]   The real difficulty in this case concerns quantificaiton. I agree with the defendants that there is no evidence that Skycope suffered any financial loss at all. While, for example, it could have led evidence within its possession to quantify that loss, such as an expert opinion based on sales of its own product, it simply complained about the defendants' lack of disclosure. There is no evidence that Skycope ever sold anything. It is therefore not possible to calculate damages based on Skycope's losses.

[289]   However, a disgorgement remedy may be appropriate. Such a remedy focuses on the benefits obtained by the wrongdoer rather than the damage to the plaintiff and is particularly appropriate where there has been a breach of fiduciary duty: *GEA* at para. 162.

[290]   The only evidence I have of the defendants' financial gain based on misuse of confidential information is Bluvec's sale to Lizheng of the direction-finding function based on the MUSIC algorithm for $800,000. I award that amount to Skycope in general damages.

Punitive Damages

[291]   The well-settled law on punitive damages is succinctly summarized in *Cruise Connections Canada v. Cancellieri*, 2012 BCSC 53 at para. 390:

> [390]   Punitive damages are awarded in exceptional circumstances to punish high-handed, malicious, arbitrary or vindictive misconduct that departs substantially from ordinary standards of decent behaviour. An award of punitive damages is not intended to compensate the plaintiff. Rather, it serves the objectives of retribution, deterrence and denunciation. Punitive damages will only be awarded where compensatory damages are insufficient to accomplish these objectives, and should be awarded in an amount that is no greater than necessary to rationally achieve their purpose: *Whiten v. Pilot Insurance Co.*, [2002] 1 S.C.R. 595 at para. 94.

[292]   The bar for such an award is high. Skycope relies on the conduct of the defendants in *GEA*. Although the trial judgment in that case is sealed, the Court of Appeal's judgment referred to the trial judge's findings about that conduct. Among other things, she found that the defendant had destroyed his computers to eliminate incriminating evidence, had manipulated time stamps on drawings to hide the fact

that they had been taken, and had used misappropriated information for personal as well as business purposes: *GEA* at paras. 57, 95, 101.

[293]   The conduct of Mr. Jia, Dr. Pan and Bluvec in this case is not comparable. I decline to award punitive damages.

Legal Fees

[294]   Skycope claims legal fees on a full indemnity basis relying on the clause in each of the defendants' written employment contracts that so provides. Mr. Jia's written contract is not enforceable. Dr. Pan's employment contract provides:

> 22.   **Legal Fees**
>
> In the event of a breach of any of paragraphs 18-20 inclusive of this Agreement by the Employee, the Employee agrees to pay the Company the full amount of the legal fees and costs incurred by the Company in enforcing this Agreement, whether or not litigation is commenced.

[295]   Dr. Pan has not argued that any special circumstances exist that could justify not enforcing this clause. I conclude that he is liable for legal fees on a full indemnity basis for the costs and fees Skycope incurred in prosecuting the breach of contract claim against him.

Counterclaim

[296]   Mr. Jia's counterclaim succeeds with respect to the loan. The plaintiff must pay Mr. Jia $10,167.06.

[297]   Mr. Jia is also entitled to the equivalent of two weeks' pay in lieu of notice under the *Employment Standards Act* in the amount of $2,307.69.

[298]   I have found that Mr. Jia has a 30% interest in Skycope by virtue of the terms of the Oral Contract. He seeks specific performance of that contractual term or, in the alternative, a constructive trust. Both remedies are equitable in nature and require the claimant to prove that an award of damages would be inadequate.

[299]   Mr. Jia has failed to demonstrate that a damages award would be inadequate in this case. He is entitled to the equivalent in damages of a 30% interest in Skycope.

CONCLUSION

[300]   In conclusion, I make the following orders:

a)   The defendants, Junfeng Jia and Leyuan Pan breached their employment agreements with Skycope;

b)   The defendants, Junfeng Jia, Leyuan Pan, and Bluvec breached the interlocutory injunction issued by this court on October 24, 2018;

c)   The defendants, Junfeng Jia, Leyuan Pan, and Bluvec are jointly and severally liable to Skycope in the amount of $800,000 in general damages;

d)   The defendant Leyuan Pan is liable to pay Skycope's legal fees incurred in its claim against him for breach of contract on a full indemnity basis;

e)   Skycope is liable to pay Junfeng Jia $12,475, representing the amount of his loan to Skycope and two weeks' pay in lieu of notice; and

f)   Skycope is liable to pay Junfeng Jia damages equivalent to a 30% equity interest in Skycope as of the date of termination of his employment.

[301]   As success was divided in these actions, each party shall bear their own costs.

"Iyer J."