

Pollmann, Christian Joachim v Ye Xianrong
[2017] SGHC 229

Case Number : Suit No 908 of 2015
Decision Date : 02 October 2017
Tribunal/Court : High Court
Coram : Vinodh Coomaraswamy J
Counsel Name(s) : Vivienne Sandhu and Anne-Marie John (Clifford Law LLP) for the plaintiff; Edwina Fan (United Legal Alliance LLC) for the defendant.
Parties : Pollmann, Christian Joachim — Ye xianrong

Tort – Negligence – Contributory negligence

[LawNet Editorial Note: The appeal to this decision in Civil Appeal No 46 of 2017 was withdrawn.]

2 October 2017

Vinodh Coomaraswamy J:

1 In November 2014, [\[note: 1\]](#) the plaintiff was cycling along the leftmost lane of Brickland Road in Jurong when the defendant’s car collided into the rear of his bicycle. The plaintiff was thrown from his bicycle and fell to the road. He suffered a number of serious injuries. [\[note: 2\]](#)

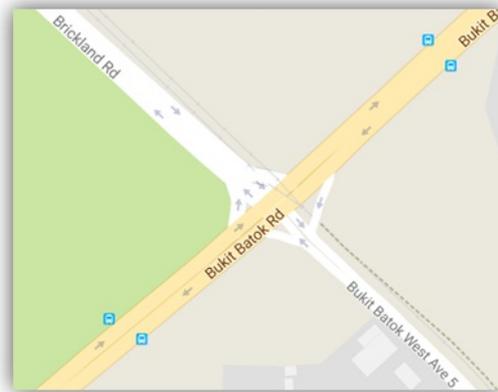
2 The defendant accepts that he was negligent in colliding into the plaintiff’s bicycle. He contests this action only the extent of his contribution to the plaintiff’s injuries. He argues that the plaintiff was himself partly to blame for the collision and that the plaintiff’s damages ought to be reduced accordingly. [\[note: 3\]](#)

3 The principal question that I have to decide, therefore, is a factual one: did the plaintiff contribute to his injuries by his own acts or omissions? Having considered the evidence and the submissions of the parties, I have held that the plaintiff did not contribute to his own injuries and that the defendant is 100% liable for the plaintiff’s injuries.

4 The defendant has appealed against my decision. I now set out my reasons.

Background

5 The collision took place on Brickland Road in Jurong, near a junction regulated by four-way traffic lights. This is a map of the junction: [\[note: 4\]](#)



6 As can be seen from the map, Bukit Batok Road runs from the southwest to the northeast through the junction. Running from the southeast to the northwest through the junction is a single road which is known as Bukit Batok West Avenue 5 southeast of the junction and as Brickland Road northwest of the junction. It is important to note that Brickland Road leads northwest out of the junction as a two-lane road before continuing as a three-lane road from the point where the slip road from Bukit Batok Road onto Brickland Road joins Brickland Road to form its third lane. [\[note: 5\]](#)

7 In this judgment, I shall refer to the rightmost lane of Brickland Road as "Lane 1". I shall use "Lane 2" to refer to what starts out immediately after the junction as the leftmost lane of Brickland Road before the slip road from Bukit Batok Road joins Brickland Road. From that point onwards, Lane 2 becomes the middle lane of Brickland Road. I shall use "Lane 3" to refer to the leftmost lane of Brickland Road from the point where the slip road from Bukit Batok Road joins Brickland Road to form its third lane.

Events leading up to the accident

8 The accident took place shortly after 8.00 pm. [\[note: 6\]](#) The plaintiff was cycling with his friend, Mr Christopher Sandford, northwest along Bukit Batok West Avenue 5 towards the junction. They stopped when they reached the junction as the traffic light was red. The plaintiff told Mr Sandford to move left, after they had crossed the junction into Brickland Road, from Lane 2 into Lane 3 once Lane 3 became available. [\[note: 7\]](#)

9 After a brief wait, the traffic light turned green. The plaintiff and Mr Sandford cycled across the junction and into Lane 2 of Brickland Road. When Lane 3 became available, they moved left into Lane 3. They then rode in Lane 3, with the plaintiff behind Mr Sandford. [\[note: 8\]](#)

10 Around the same time, the defendant was driving northeast along Bukit Batok Road and moved left to enter the slip road in order to join Brickland Road and drive northwest. As he drove along the slip road, he noticed the plaintiff and Mr Sandford at the end of the slip road, filtering left from Lane 2 into Lane 3. Seeing this, the defendant stopped his car to allow the cyclists to complete their manoeuvre. [\[note: 9\]](#) The defendant then continued driving in the slip road until it became Lane 3 of Brickland Road.

The collision and its aftermath

11 As the defendant drove past the point where the slip road became Lane 3, he saw the plaintiff and Mr Sandford ahead of him, cycling on the left side of Lane 3 near the double yellow lines.

According to the defendant, he accordingly drove his car on the right side of Lane 3, near the lane divider between Lane 3 and Lane 2 and not directly behind the plaintiff. [\[note: 10\]](#)

12 The defendant then decided to filter right into Lane 2 of Bricklands Road. He first checked his blind spot for traffic in Lane 2 by turning his head to the right to look behind him over his right shoulder at Lane 2. [\[note: 11\]](#) He then turned his head back to face the front. He now saw the plaintiff directly in front of his car and very close to it. [\[note: 12\]](#) The defendant applied his brakes immediately and with full force but could not stop in time. The front left bumper of his car collided into the rear wheel of the plaintiff's bicycle. The plaintiff's bicycle was shunted a short distance before the plaintiff fell to the road. [\[note: 13\]](#)

13 The plaintiff was taken from the scene of the collision to hospital. He spent about six months there recovering from his injuries. [\[note: 14\]](#) Amongst his injuries are head injuries which have affected his memory of the collision and its aftermath. [\[note: 15\]](#)

14 About an hour after the collision, two traffic police officers arrived at the scene. [\[note: 16\]](#) The senior officer, Staff Sergeant Hishamudin, took measurements and incorporated them into a sketch plan. The junior officer, Sergeant Mundzir, took a statement from the defendant and recorded it in his patrol log card. [\[note: 17\]](#)

15 In August 2016, [\[note: 18\]](#) the traffic police charged the defendant with a criminal offence arising from the collision. He was charged under s 338(b) of the Penal Code (Cap 224, 2008 Rev Ed) with the offence of causing grievous hurt to the plaintiff by doing an act so negligently as to endanger human life. [\[note: 19\]](#) The negligent act in the charge was the defendant's failure to keep a proper lookout ahead when he collided into the plaintiff. The defendant pleaded guilty and was convicted. [\[note: 20\]](#) He was fined \$5,000 and disqualified from driving for three years. [\[note: 21\]](#)

The evidence at trial

16 The key issue in this case is precisely how the defendant's car came to collide with the plaintiff's bicycle if the defendant had seen the plaintiff and Mr Sandford cycling ahead of him and had indeed, as he testified, adjusted the speed and direction of travel of his car to avoid a collision. To resolve this issue, the parties adduced two types of evidence at trial: eyewitness evidence and expert evidence.

Eyewitness evidence

17 Four witnesses – the defendant, the plaintiff, Mr Sandford and one Mr Johari Bin Samsuri – gave oral evidence of the lead up to the collision. But none of them witnessed the actual impact. I use the verb "witness" in the technical sense of perceiving an event with one's own senses – for example, the sense of sight – such that one can give direct oral evidence of the event within the meaning of s 62 of the Evidence Act (Cap 97, 1997 Rev Ed).

18 The defendant's evidence is that the collision occurred, at least in part, because the plaintiff suddenly changed direction by swerving to the right and into the path of his car. [\[note: 22\]](#) However, for reasons I will come to, I do not accept that the defendant witnessed the plaintiff swerving to the right. [\[note: 23\]](#)

19 The plaintiff could not give eyewitness evidence of the the collision because he was struck from behind. More than that, though, his head injuries mean that he cannot remember anything about the collision or its immediate aftermath. [\[note: 24\]](#) The plaintiff is adamant, however, that he is an experienced cyclist, that he had no reason suddenly to change his direction of travel so as to put him on a converging path with the defendant's car, and that he did not so do. [\[note: 25\]](#)

20 Mr Sandford also could not give eyewitness evidence of the collision. He was cycling about 30m ahead of the plaintiff at the time [\[note: 26\]](#) and facing forward. Mr Sandford realised that something was amiss only when he heard the plaintiff shout upon impact. [\[note: 27\]](#) He therefore did not witness the collision or the manner in which the plaintiff was cycling immediately before it.

21 Mr Johari is a lorry driver who was driving his employer's lorry along Brickland Road in Lane 2 when the collision occurred. [\[note: 28\]](#) His evidence is independent of both the plaintiff and the defendant. From his vantage point, he witnessed the lead up to the collision but could not witness the moment of impact. His view at that precise moment was obstructed by the defendant's car. Mr Johari's evidence was that he watched the lead up to the collision with alarm as the defendant's car got "closer and closer" [\[note: 29\]](#) to the plaintiff's bicycle in the moments before impact. [\[note: 30\]](#)

Expert evidence

22 Given the limitations of the eyewitness evidence, both parties rely heavily on expert evidence. Each party called a traffic accident reconstruction expert who expressed an opinion on the likely cause of the collision. The plaintiff called Mr Grant Johnston, a forensic consulting engineer practising in New South Wales in Australia. The defendant called Mr Robert Ruller, a director of a firm providing road traffic collision investigation and analysis in Queensland, Australia.

23 Both experts based their opinion on the physical and electronic evidence available. The physical evidence includes contemporaneous photographs taken by both Mr Sandford [\[note: 31\]](#) and the police at the scene and the sketch plan prepared by Staff Sergeant Hishamudin. The electronic evidence comprises location data recorded at one-second intervals in real time by the plaintiff's global positioning system ("GPS") device attached to his bicycle. [\[note: 32\]](#)

24 Mr Sandford's photographs show the defendant's car in Lane 3, towards the right of the lane, near the dividing line between Lane 2 and Lane 3. The plaintiff is shown on the road, about a metre in front of the car and on its passenger's side, lying flat on his back and parallel to the double yellow lines. [\[note: 33\]](#)

25 The sketch plan indicates a distance of 1.7m between the front left wheel of the defendant's car and the kerb. [\[note: 34\]](#) Physical inspections of the car by Mr Johnston [\[note: 35\]](#) and by Mr Ruller [\[note: 36\]](#) place the point of impact on the car at about 50cm from its front left side.

26 The GPS data was of substantial importance at trial (see [79]–[87] below). The data shows that the plaintiff was cycling on the left side of Lane 3 before he moved right around the time of the impact. [\[note: 37\]](#) The crucial question is whether the plaintiff's movement to the right occurred before the impact and was therefore its cause (at least in part), or after the impact and was therefore its consequence.

Issues to be determined

27 The defendant originally pleaded in his defence that he neither caused nor contributed to the collision. [\[note: 38\]](#) At trial, however, he conceded that he was driving negligently by failing to keep a safe distance from the plaintiff [\[note: 39\]](#) and by failing to spot the plaintiff in time to avoid the collision. [\[note: 40\]](#) In addition, counsel for the defendant, Ms Fan, clarified in her closing submissions that the defendant does not disclaim all liability for the plaintiff's injuries, but is arguing only that the plaintiff was contributorily negligent. [\[note: 41\]](#)

28 In this regard, there was a preliminary issue with respect to the evidentiary weight that I ought to accord to the defendant's conviction (see [13] above). [\[note: 42\]](#) Section 45A(1) of the Evidence Act provides that a person's conviction is admissible at trial to the extent that it is relevant to an issue in the action. The defendant was convicted of endangering human life by negligently failing to keep a proper lookout for the plaintiff. There is a clear factual and legal overlap between the charge in the criminal case and the cause of action in this suit. The defendant's conviction is therefore relevant to the issue of his negligence in this action. But since the defendant now concedes that the collision was caused by his negligence, at least in part, it is not necessary for me to analyse further the probative value of his conviction. I thus make no further remark on this except to observe that the defendant's conviction does not bar him from raising the defence of contributory negligence: see *Kim Anseok and another (personal representatives of the estate of Kim Miseon, deceased) v Shi Sool Hee* [2010] SGHC 124 at [28]–[31].

29 Accordingly, there are only two issues which I have to determine: (i) whether the plaintiff contributed to his injuries by his own acts or omissions; and (ii) if so, the degree to which the damages payable by the defendant to the plaintiff should be reduced.

Contributory negligence

30 The doctrine of contributory negligence is discussed comprehensively in *Asnah bte Ab Rahman v Li Jianlin* [2016] 2 SLR 944 ("*Asnah*"). Put simply, a victim of a negligent act is said to have contributed to his own injuries "if he ought to have objectively foreseen that his failure to act prudently could result in hurting himself and failed to take reasonable care to guard against that foreseeable harm": see *Asnah* at [18].

31 At common law, the doctrine of contributory negligence operated as a total defence. By virtue of s 3(1) of the Contributory Negligence and Personal Injuries Act (Cap 54, 2002 Rev Ed), it now operates only as a partial defence. Section 3(1) empowers a court to allow a claim by a contributorily negligent plaintiff while reducing his damages to such extent as the court thinks just and equitable having regard to his share of the responsibility for his own injury.

32 A defendant who raises the defence of contributory negligence bears the burden of proving it (see *Asnah* at [113]) and bears that burden on the balance of probabilities (see *Hicks v British Transport Commission* [1958] 1 WLR 493 at 503). It is therefore common ground that the defendant here has to establish that the plaintiff failed to take reasonable care to guard himself against foreseeable harm in the manner in which he rode his bicycle leading up to the collision.

Parties' cases

33 Ms Fan advances two alternative cases for the defendant. [\[note: 43\]](#) Her primary case is that the plaintiff contributed to the collision because he suddenly swerved to the right and into the defendant's path in the split second before impact. [\[note: 44\]](#) In the alternative, Ms Fan contends that

the plaintiff failed to keep to the left of Lane 3, [\[note: 45\]](#) thereby obstructing the defendant's path and riding in a manner which contravened r 8 of the Road Traffic (Bicycles) Rules (Cap 276, R 3, 1990 Rev Ed). The difference between these two cases is that the primary case posits a sudden change in direction by the plaintiff while the alternative case does not.

34 The plaintiff advances only a single case: he was at all times cycling on the left side of Lane 3 and did not swerve to the right at any time. [\[note: 46\]](#) Counsel for the plaintiff, Ms Sandhu, rejects the allegation that the plaintiff suddenly swerved to the right as either an afterthought or mere speculation. [\[note: 47\]](#) The sole cause of the collision, she submits, was the defendant's negligence in driving too closely and in failing to keep a safe distance. [\[note: 48\]](#)

Plaintiff's alleged swerve to the right

35 I begin by analysing Ms Fan's primary case: that the collision was caused in part by the plaintiff suddenly swerving to the right in the split second before impact. The first point which the plaintiff makes on the defendant's primary case, and which I accept, is that the defendant himself conceded in cross-examination that, even on the assumption that the plaintiff did swerve suddenly to the right, the defendant was in any event negligent in driving so close to the plaintiff's bicycle that he could not avoid colliding with him. That admission by the defendant cuts the factual foundation out of Ms Fan's primary case and suffices, in itself, to reject it.

36 Be that as it may, Ms Fan raises three arguments in support of her primary case. [\[note: 49\]](#) First, she submits that defendant's evidence is eyewitness evidence that the plaintiff swerved to the right. Second, she argues that his evidence is reliable because it is not contradicted by the independent evidence. Third, she contends that the GPS data shows that the plaintiff moved to the right *before* the collision and not *after*.

37 I cannot accept Ms Fan's primary case. On the totality of the evidence, I find that the defendant did not in fact witness the plaintiff swerve suddenly to the right. Further, the defendant's evidence does not suffice to draw an inference on the balance of probabilities that the plaintiff did swerve suddenly to the right. Finally, the defendant's primary case is not supported by the independent evidence. In particular, and for the reasons set out below, it is contradicted by the GPS data.

38 I now address Ms Fan's three arguments in turn.

The defendant's evidence

The defendant did not testify that he saw the plaintiff swerve

39 Ms Fan submits [\[note: 50\]](#) that the defendant's evidence is eyewitness evidence that the plaintiff did indeed swerve suddenly to the right, into the defendant's path, in the split second before impact. [\[note: 51\]](#) I do not accept this submission.

40 The first step in assessing the defendant's evidence is to understand what precisely that evidence is. The defendant's positive case on this issue of fact is set out in his affidavit of evidence in chief. I pick up the defendant's story after he has seen the plaintiff and Mr Sandford filtering left from Lane 2 into Lane 3 of Brickland Road:

13. At this juncture, my Vehicle was not directly behind the Plaintiff's bicycle. The Plaintiff's

bicycle was in front of my Vehicle but on the left side of [Lane 3] while my Vehicle was on the right side. The plaintiff's bicycle was not within the travel path of my Vehicle.

14. Thereafter, I decided to filter to [Lane 2]. In order to do so, I turned my head to check the blind spot on my right.

15. When I turned back to the front shortly after checking the blind spot, the plaintiff had suddenly swerved out to his right from the double yellow lines towards the center (sic) of [Lane 3] and had encroached directly into my travel path.

41 The words used – “had suddenly swerved” – suggests that the defendant did not actually witness the plaintiff swerve to the right. It suggests instead that the plaintiff “had...swerved...to his right” while the defendant’s vision and attention were directed to checking his blind spot. That in turn suggests that the defendant is, in this formulation, not reporting what he witnessed but is instead reporting a conclusion as to what he believes must have happened while he was looking elsewhere.

42 Although the defendant’s oral evidence in cross-examination [\[note: 52\]](#) was muddled, it does support my understanding of his evidence of the plaintiff’s sudden swerve to the right being a conclusion rather than a fact which the defendant witnessed. The defendant accepted in cross-examination that he did not witness the plaintiff swerving to the right and into the defendant’s path. [\[note: 53\]](#) Instead, what he witnessed was that the plaintiff was “very near” [\[note: 54\]](#) his car when the defendant looked forward again after having checked his blind spot: [\[note: 55\]](#)

A: (Through Interpreter) At that time, I did not see him swerve from left to right but maybe it was zero point zero something seconds. I saw him – I saw him near to my car when I turned over to check my blind spot.

Court: When you turned back after checking your blind spot?

A: Yah.

43 This is consistent with another question and answer in the defendant’s cross-examination. In his answer, the defendant first implies that the plaintiff swerved to the right as a process, part of which he did witness; but immediately follows that by referring only to the fact that the plaintiff was in front of the defendant’s car in the split second before impact: [\[note: 56\]](#)

Q: My question to you is, did you see the plaintiff swerving out?

A: (Through Interpreter) Like I said earlier, I didn’t see the entire process, it was when they was about to reach.

44 The defendant confirmed this in his re-examination: [\[note: 57\]](#)

Q: Okay, I want to know that, apart from the reason that you had seen the last part of the swerving, any other reasons that you said the plaintiff had swerved right? Why did you say the plaintiff had served [sic] right?

...

A: At first, he was nearer to the kerb and my car was nearer to the right. That’s it.

Q: And then what happened?

A: (Through Interpreter) *At first, when I was following behind, he was on the left-hand side nearer to the kerb while I was on the right-hand side about to change lanes. Then subsequently, the accident happened. That's it.*

[emphasis added]

45 I therefore do not accept that the defendant witnessed the plaintiff swerving to the right immediately before impact.

The "sudden swerve" is an afterthought

46 This finding is consistent with the defendant's earliest account of what he witnessed in the moments before the collision. That account is found in the statement which Sergeant Mundzir took from the defendant at the scene and recorded in his patrol log card. [\[note: 58\]](#) There is no mention whatsoever in this statement that the plaintiff had swerved to the right immediately before the impact. If that is in fact what happened, there are only two possible explanations for this omission from the defendant's recorded statement. Either: (i) the defendant did not tell Sergeant Mundzir that the plaintiff had swerved to the right; or (ii) the defendant did tell Sergeant Mundzir that the plaintiff had swerved to the right but Sergeant Mundzir failed to record it.

47 Ms Fan submits that the second explanation is the more likely. She says that the absence in the defendant's recorded statement of an assertion that the plaintiff had swerved to the right does not necessarily mean that the defendant failed to tell Sergeant Mundzir that. [\[note: 59\]](#) That is undoubtedly correct as a matter of logic. But there is no basis for Ms Fan to make the further submission, which she attempts to make, that the defendant did inform Sergeant Mundzir that the plaintiff had swerved to the right but Sergeant Mundzir failed to record that part of the defendant's statement. The defendant himself does not go that far in his evidence. His evidence is simply that he cannot remember whether he told the sergeant that the plaintiff had swerved to the right. [\[note: 60\]](#) Ms Fan's explanation for the omission has no evidential basis.

48 Leaving that aside, Ms Fan also speculates that Sergeant Mundzir's inexperience as a police officer might have led him to fail to record the defendant's statement that the plaintiff swerved to the right. [\[note: 61\]](#) But it does not require a great deal of experience for a trained police officer to recognise as critical an assertion by one party involved in a collision that the other party had changed direction suddenly in the moments before the collision.

49 I therefore reject Ms Fan's suggestion that Sergeant Mundzir could have omitted to record a detail as critical as this if the defendant had in fact mentioned it to him. In the circumstances, I find that the defendant did not tell Sergeant Mundzir that the plaintiff had swerved to the right and into the defendant's path. This finding is supported by Mr Sandford's evidence that he did not hear the defendant say that the plaintiff had swerved suddenly to the right while the defendant was still at the scene of the collision. [\[note: 62\]](#)

50 Given this finding, there are only two possible explanations for the defendant's failure to mention this at the earliest possible opportunity. Either: (i) the defendant did not witness the plaintiff swerve suddenly to the right; or (ii) the defendant did witness the plaintiff swerve suddenly to the right but did not tell Sergeant Mundzir that.

51 The defendant suggests that it is the second explanation which is the more likely. He says that his statement to Sergeant Mundzir may not be complete because he was asked merely to give a rough description of the collision. [\[note: 63\]](#) But his statement includes a number of details which are background rather than foreground. These include the defendant making a left turn from Bukit Batok Road and slowing down upon seeing the plaintiff. [\[note: 64\]](#) Even if it were true that the defendant was told to give only a rough description, the patrol log card shows that the defendant supplied these background details and that Sergeant Mundzir faithfully recorded them. It is to my mind highly unlikely that a person in the defendant's position, speaking an hour or so after the collision, would carefully spell out background events leading up to the collision but fail to mention an event critical to the cause of the collision, especially one as dramatic as the plaintiff suddenly swerving to the right into the defendant's path.

52 The only explanation for the defendant's omission in his statement to Sergeant Mundzir, to my mind, is that the defendant did not in fact witness the plaintiff swerve suddenly to the right. I attach great weight to this statement and this omission for three reasons. First, the defendant gave the statement about an hour after the collision. [\[note: 65\]](#) His recollection of the collision would still have been fresh in his mind. Second, the defendant gave his statement before he would have had the time to form a mental reconstruction of the events which he had not witnessed or to try and rationalise his acts and omissions in the split second before and at the time of impact. Finally, the defendant gave this statement before he had any indication that he was to be prosecuted and therefore before he had a strong incentive to make self-serving exculpatory statements.

53 My finding that the defendant's assertion that the plaintiff swerved to the right is an afterthought is supported by the fact that it was only in his police report, lodged on the following day, about 17 hours after the collision, that the defendant said for the first time that "the cyclist suddenly swerve[d] out to the centre of [Lane 3]." [\[note: 66\]](#) The allegation became part of his account of events thereafter. Thus, his then solicitors repeated this allegation in their representations to the Attorney General's chambers dated 23 December 2015, where they said "our client saw the victim's bicycle suddenly swerve to the right into our client's path for no apparent reason". [\[note: 67\]](#) Those representations were submitted in an effort to have the charge against the defendant under s 338(b) of the Penal Code withdrawn. This formulation – that the defendant "saw the ... bicycle swerve" – suggests that the defendant actually witnessed the plaintiff swerve to the right and into his path. But that is inconsistent with his failure to mention this fact to Sergeant Mundzir. It is also inconsistent with my reading of the defendant's evidence in this action, both written and oral.

54 In the draft plea in mitigation which the defendant's then counsel prepared on 25 August 2016, it was submitted on his behalf that "When the Accused turned his head back [after checking his blind spot], the Accused saw that the victim's bicycle had swerved out and was directly in his path". [\[note: 68\]](#) This is now the same formulation – "had swerved" – which the defendant has used in his affidavit of evidence in chief. As I have explained above, this formulation says something quite different from what the defendant said in his police report and what his solicitors said on his behalf in their representations to the Attorney-General's chambers.

55 The statement of facts which his counsel agreed with the prosecution on 30 August 2016, however, makes no mention at all of the plaintiff swerving to the right, whether as a recollection or a reconstruction. It says merely: [\[note: 69\]](#)

[The defendant] looked to his right to check his blind spot and, upon seeing no vehicles to his right, began to filter into [Lane 2]. At this stage, the [defendant] turned his head back to look in

front and noticed [the plaintiff] in front of him. The front left portion of the Car then collided with [the plaintiff].

56 It is true that the defendant's original plea in mitigation did assert that the plaintiff had swerved suddenly to the right. The defendant's evidence is that he agreed to delete this assertion in order to save legal fees and to avoid a custodial sentence. [\[note: 70\]](#) Ms Sandhu suggests that the defendant deleted this assertion because the prosecution disbelieved the allegation. [\[note: 71\]](#) Either or both of these may be the true explanation for the deletion. But that has no bearing on the question before me. The fact remains that the inconsistencies in the defendant's evidence mean that his oral evidence is an insufficient basis for me to find on the balance of probabilities that the plaintiff contributed to the collision by swerving suddenly to the right and into the defendant's path.

57 I find that the defendant's allegation that the plaintiff swerved suddenly to the right is an afterthought. I accept Ms Sandhu's submission to that effect. [\[note: 72\]](#)

Primary facts do not lead to an inference that the plaintiff swerved

58 Even taking the defendant's case at its highest, I also find that the primary facts which the defendant says he witnessed do not lead to the inference on the balance of probabilities that the plaintiff did in fact suddenly swerve to the right and into the defendant's path.

59 The only way in which the defendant could draw the conclusion that the plaintiff had swerved suddenly to the right is by attempting to reconstruct in his mind what must have happened in the few seconds between what the defendant witnessed ahead of him at two points in time: (i) immediately before turning to check his blind spot and (ii) immediately after he turned to look forward again.

60 At the first point in time, all that the defendant witnessed was that the plaintiff was ahead of the defendant and, he says, to his left. The significance of the evidence is that the defendant is saying that at that point, he and the plaintiff were on parallel or diverging paths. At the second point in time, all that the defendant witnessed was that the plaintiff was directly in front of the defendant's car. The parallel or diverging path had now become a converging path. The defendant's explanation of how their non-converging paths became converging paths is that the plaintiff "had...swerved...to his right". [\[note: 73\]](#)

61 If these primary facts are true, I accept that they prove that one of the parties changed his path in the seconds while the defendant's attention was diverted to his checking blind spot. But even then, I do not accept the defendant's case that that change came from the plaintiff. The defendant has posited no reason for an experienced cyclist such as the plaintiff to have swerved suddenly to the right. Instead, it is to my mind quite probable in the light of Mr Johari's evidence, to which I will come, that the defendant was mistaken in his first observation and that the parties were from the outset on a converging path. Alternatively, if the defendant's initial observation was correct, it also appears to be probable that it was the defendant who unknowingly and inadvertently strayed to the left in those seconds.

62 In that sense, I accept the overall conclusion of Mr Johnston, who opined as follows: [\[note: 74\]](#)

Based on my analysis of both the GPS data and the point of impact on the vehicle I determined that the likely point of impact was within the left hand portion of [Lane 3] at a point about 25 metres beyond the commencement of [Lane 3] and about 4 seconds after [the plaintiff's] bicycle passed [in front of] the defendant's vehicle.

The evidence appears to suggest that the [defendant's] vehicle has slowly continued to gain on [the plaintiff's] bicycle for around four seconds after being passed by [the plaintiff's] bicycle until [the defendant] ultimately catches up with it and impacts with the rear of the bicycle. This was noted to be consistent with the observations of [Mr Johari] who observes the vehicle to be gaining on the bicycle over a significant period of time seemingly without responding.

In my opinion this was due to the driver's suggested focus on changing lanes at this time as a result of which he has failed to look ahead and identify the cyclist during this four seconds of reasonably close following distance.

63 In the final analysis, therefore, the defendant has failed to discharge his burden of proof of establishing that the plaintiff swerved suddenly to the right, thereby contributing to the collision.

64 This is not to say that I find that the defendant has advanced a dishonest case in positing a swerve by the plaintiff to his right as a crucial element of his primary case. Seeing the plaintiff directly in front of his car when he turned back after checking his blind spot would have been wholly unexpected for the defendant. It is not difficult to see that, in order to explain the unexpected, the defendant could have over time reconstructed a swerve by the plaintiff right and into the defendant's path in order to rationalise the defendant's own actions and omissions, even if the defendant witnessed no part of a swerve. As Ms Sandhu points out, even if the defendant genuinely believes that he saw the "last part" of a swerve, this does not mean that that is what he actually saw or that the plaintiff had in fact swerved to the right. [\[note: 75\]](#)

65 I therefore do not accept Ms Fan's reliance on the defendant's oral evidence as evidence that the plaintiff swerved to the right and thereby caused the collision in part.

The independent witnesses' evidence

66 Ms Fan further argues that the defendant's evidence in relation to the plaintiff's swerve to the right is reliable because it is not contradicted by the independent evidence. She submits that since no witness claims that the plaintiff swerved *after* the collision, it must mean that the plaintiff swerved *before* the collision. [\[note: 76\]](#)

67 But this argument suffers from a number of defects. First, as a matter of logic, it cannot be said that the absence of contradictory evidence, in itself, bolsters the credibility of the defendant's oral evidence. Even if one puts aside the limitations of the defendant's evidence as canvassed above, it does not logically follow that the defendant's evidence that the plaintiff must have swerved to the right into the defendant's path before the impact is more credible merely because other witnesses do not say otherwise.

68 Second, leaving its merits aside, this argument is weak because it does not advance the defendant's positive case that the plaintiff is guilty of contributory negligence. The defendant bears the burden of proving on the balance of probabilities that the plaintiff was contributorily negligent. The absence of contrary evidence from the independent witnesses does not advance the positive case which the defendant must advance and win.

69 Third, and most importantly, I find that the evidence of the only independent witness of fact, Mr Johari, in fact undermines the defendant's case.

70 Mr Johari's evidence is that he saw the defendant's car "proceeding straight and strangely

getting closer and closer" to the plaintiff before they collided. [\[note: 77\]](#) This suggests that the defendant was on a converging path with the plaintiff for a period of time before the collision – estimated by Mr Johnston as four seconds – not just in the split second immediately before impact. That is weighty and independent evidence from Mr Johari which contradicts the defendant's case that the plaintiff and the defendant were on parallel or diverging paths and would not have collided but for the plaintiff's sudden swerve to the right.

71 It is true that Mr Johari did not see the actual impact between the defendant's car and the plaintiff's bicycle. [\[note: 78\]](#) This is because his view of the impact was blocked by the defendant's car. [\[note: 79\]](#) As a result, he could see only that the two were moving closer to each other [\[note: 80\]](#) before hearing a bang. [\[note: 81\]](#) Notwithstanding this, Mr Johari was consistent in his evidence that the defendant and the plaintiff were on converging paths before the collision. There would have been no cause for his very real sense of alarm otherwise. Although he could not see the actual impact, he is clear in his evidence that up to the last second before impact, he saw the plaintiff cycling straight before the defendant's car suddenly caught up to it. [\[note: 82\]](#) It is for this reason that I disbelieve the defendant when he says that he was to the right of the plaintiff just before the defendant turned to check his blind spot. It appears more likely to me that the left side of the defendant's car was in fact directly behind the plaintiff when the defendant entered Lane 3 about four seconds behind the plaintiff.

72 Moreover, this aspect of Mr Johari's evidence was not challenged by Ms Fan. In fact, it is evident from her questions to Mr Johari that she accepted that the defendant's car and the plaintiff's bicycle were converging in the lead up to the collision for more than just the split second immediately before impact. [\[note: 83\]](#)

73 To address the inconsistency between the defendant's and Mr Johari's evidence, Ms Fan highlights that the experts are agreed that the point of the actual collision was about 2.16m from the kerb at the left of Lane 3. [\[note: 84\]](#) They derive that figure from physical inspection of the defendant's car and Staff Sergeant Hishamudin's measurements taken at the scene of the collision (see [25] above). [\[note: 85\]](#) Relying on that, Ms Fan argues that if the plaintiff had been cycling on the left side of Lane 3 before the collision, and if the point of impact was that far to the right into Lane 3, that must mean that the plaintiff swerved into the defendant's path. But this ignores the fact that the measurements were taken with reference to the final or resting position of the car after the collision, not where the car was when the collision actually occurred. [\[note: 86\]](#) In other words, there remains the possibility – indeed a very high probability, given the defendant's evidence – that the defendant's car continued its direction of travel towards Lane 2, *ie* to the right, after colliding with the plaintiff's bicycle and before coming to a complete stop.

74 Mr Johnston's evidence in this regard is that the defendant's car was on a slightly rightward trajectory at the point of impact. He comes to this view after examining photographs of the car in its final resting position after the collision. [\[note: 87\]](#) This suggests that the defendant's car continued moving forward and slightly to the right after it had collided into the plaintiff's bicycle in Lane 3.

75 Ms Fan challenges Mr Johnston's evidence by suggesting that his conclusion is not credible as it is based on his "subjective perception" of the distance between the kerb and the resting position of the defendant's car as shown in the photographs. [\[note: 88\]](#) But since all measurement is by way of perception, Ms Fan's challenge is hollow unless it is her case – which it is not – that Mr Johnston failed to apply a proper scientific method of measuring that trajectory. Mr Johnston also in no way

suggests that his opinion on this issue is anything more than a reasoned approximation. While Ms Fan appears to have mistaken Mr Johnston as suggesting that his opinion is conclusive, his evidence is that the photographs do not give him sufficient information to determine accurately the direction in which the defendant's car was pointed when it came to a stop. [\[note: 89\]](#)

76 Ms Fan points out that Mr Ruller argues that the defendant's car stopped in a position that was parallel to the kerb. [\[note: 90\]](#) But his opinion is based on the same photographs of the scene of the collision as Mr Johnston examined. [\[note: 91\]](#) And neither side presented any evidence to show that the method used by its expert in arriving at his opinion on this issue based on these photographs is superior to the other expert's method. Thus, taking Ms Fan's case at its highest, the only conclusion I can safely draw from the experts' contradictory positions is that the photographs provide insufficient information to determine whether the defendant's car came to rest at the same distance from the kerb as it was when the impact took place.

77 In this vein, the observation of Andrew Phang Boon Leong JC (as he then was) in *Khoo Bee Keong v Ang Chun Hong and Another* [2005] SGHC 128 at [68] in relation to expert evidence is apposite: if the materials used by the experts to derive their opinions are shaky or flawed, then the experts' evidence will be of limited utility to the court. This is one such instance. Although Mr Johnston cannot conclusively say that the defendant's car was indeed on a rightward trajectory, Mr Ruller is equally unable to say that the defendant's car was pointed straight ahead. Accordingly, the evidence with respect to the resting position of the defendant's car is at best equivocal. I cannot therefore find that the impact took place at the same distance from the kerb as the position at which the defendant brought his car to a stop after the collision.

78 In the premises, I disagree with Ms Fan that the evidence from Mr Johari or from the expert witnesses supports the defendant's case that the plaintiff swerved to the right.

The GPS data

79 Ms Fan's third argument is that the GPS data shows that the plaintiff swerved to the right before the collision. In this regard, it is common ground that the GPS data does record that the plaintiff's bicycle moved to the right around the time of the collision. The dispute is whether the rightward movement occurred before or after impact.

80 Both sides tendered expert reports on the interpretation of the GPS data. The plaintiff's expert, Mr Johnston, opines that the plaintiff's bicycle moved to the right after the collision [\[note: 92\]](#) and submitted two reports detailing his analysis of the evidence. [\[note: 93\]](#) On the other hand, the defendant's expert, Mr Ruller, [\[note: 94\]](#) opines that the plaintiff's bicycle moved to the right before the collision. [\[note: 95\]](#) Mr Ruller contends that the GPS data is unreliable and that Mr Johnston's conclusion is unsupported by the physical evidence such as the photographs of the scene of the collision and the measurements taken by Staff Sergeant Hishamudin. [\[note: 96\]](#)

81 In this regard, six data points recorded by the GPS device proved to be crucial. I set out the six data points here, as tabulated by Mr Johnston: [\[note: 97\]](#)

Data point	Distance	Speed	Cadence
4399	7.78m	28km/h	70

4400	8.34m	30km/h	72
4401	8.65m	31km/h	53
4402	6.13m	22km/h	53
4403	4.35m	16km/h	53
4404	2.99m	11km/h	0

Each data point records the location of the plaintiff's bicycle at one second intervals. From these data points, it is possible to calculate the distance that the bicycle has travelled in that one second as well as its speed and its bearing. The plaintiff's GPS device also records cadence, *ie* how fast the plaintiff was pedalling during that one second interval, expressed in revolutions per minute.

82 It is not disputed that the plaintiff's bicycle started moving to the right at or around data point 4401. [\[note: 98\]](#) Mr Johnston's conclusion is that the impact occurred before that, at or around data point 4399 and 4400. [\[note: 99\]](#) He bases his conclusion mainly on the plaintiff's speed and cadence. [\[note: 100\]](#) Mr Johnston points out that, by data point 4401, the plaintiff's cadence has already decreased. That indicates that the plaintiff's pedalling had slowed measurably before this data point. [\[note: 101\]](#) Mr Johnston also points out that the plaintiff was increasing speed up to and including data point 4401, at which point his speed dropped significantly from 31km/h at data point 4401 to 22km/h at data point 4402. [\[note: 102\]](#) According to Mr Johnston, the increase in speed up to and including data point 4401 is likely to have been caused by the impact with the defendant's car. The rapid decrease in speed after data point 4401 is the likely result of the plaintiff losing control of the bicycle before it slid to a halt on its side. [\[note: 103\]](#)

83 The defendant disputes Mr Johnston's analysis and conclusion. Relying on a mixture of Mr Ruller's expert evidence and her own reasoning, Ms Fan submits that that the GPS data, properly interpreted, shows that the rightward movement occurred pre-impact at around data point 4404. [\[note: 104\]](#)

84 To begin with, she contests the accuracy of the GPS device, pointing out that the location data has a margin of error of 3.65m [\[note: 105\]](#) and that the bearing data (which is calculated from the changes in location data over time and which indicates the direction of travel) is inaccurate. [\[note: 106\]](#) But any inaccuracy in bearing is inconsequential because Mr Johnston did not rely on the plaintiff's bearing to arrive at his conclusion. [\[note: 107\]](#)

85 With respect to the accuracy of the location data, Mr Johnston tested the GPS device by attaching it to another bicycle and riding it along the road where the collision took place. He found that the GPS device was accurate enough to identify which part of a lane on Brickland Road the plaintiff was cycling on. [\[note: 108\]](#) This aspect of Mr Johnston's evidence was not challenged by Ms Fan in cross-examination [\[note: 109\]](#) or commented upon by Mr Ruller during his examination in chief. [\[note: 110\]](#) I therefore accept that the location data recorded by the GPS device is a sufficiently accurate basis for the findings of fact which I must make.

86 In addition to challenging the accuracy of the data recorded by the GPS device, Ms Fan also challenges Mr Johnston's analysis of the data. To this end, she speculates and suggests a number of alternative scenarios. For instance, in attempting to establish that the collision occurred at data point 4404, Ms Fan argues that the acceleration to 31km/h at data point 4401 was not caused by the collision. Instead, she submits that this could have been a result of the plaintiff cycling more quickly. [\[note: 111\]](#) She submits also that there are many reasons why the plaintiff may have slowed down from data point 4401, and suggests that the plaintiff could have been applying the brakes. [\[note: 112\]](#) In my view, all of the possibilities offered by Ms Fan are less likely than the analysis suggested by Mr Johnston. Of particular significance is a comparison of cadence and speed. The cadence data shows that the plaintiff's pedalling slowed by almost one-third between data point 4400 and 4401. But during the same one-second interval, his speed increased, albeit marginally. That is not consistent with the plaintiff's forward motion at that point being provided predominantly by his pedalling. As Mr Johnston points out, it is unlikely that the point of impact was after data point 4400 because that would involve the plaintiff pedalling and reducing speed at the same time, with no external forces acting on the plaintiff and his bicycle. [\[note: 113\]](#)

87 More importantly, as Ms Sandhu points out, many of the scenarios offered by Ms Fan were not put to Mr Johnston during cross-examination. [\[note: 114\]](#) For example, it was not put to Mr Johnston that if the point of impact was between data points 4399 and 4400, then the plaintiff's bicycle should have travelled another 22m to 30m after the impact. [\[note: 115\]](#) It was also not put to Mr Johnston that the point of impact should have been at data point 4404 as Ms Fan contends. Indeed, that is a surprising contention for her to make, because even her own expert Mr Ruller does not suggest it. [\[note: 116\]](#) Accordingly, I cannot accept any of Ms Fan's submissions on the GPS data.

88 In the premises, I find that the defendant has failed to prove that the plaintiff swerved to the right and into the path of the defendant's car. Not only is there no eyewitness evidence from the defendant to support this allegation, it is contradicted by the independent witness and contrary to the inferences properly to be drawn from the GPS data.

Plaintiff's alleged failure to keep to the left

89 Ms Fan's alternative submission on contributory negligence is that the plaintiff was, prior to the collision, riding near the middle of Lane 3 and obstructing the defendant's path. This alternative case posits no sudden change of direction by the plaintiff in the split second before impact. Ms Fan submits that riding in this manner is a contravention of r 8 of the Road Traffic (Bicycles) Rules and amounts to contributory negligence. In my judgement, not only is the defendant's alternative case impermissible, it is also not borne out by the evidence.

Defendant's alternative and inconsistent case

90 At the outset, I make the point that this alternative case is inconsistent with the defendant's own evidence. In his affidavit of evidence in chief, the defendant states that he saw the plaintiff cycling "at the left side of [Lane 3] at about the double yellow lines". [\[note: 117\]](#) He further states that, before he turned his head to the right to check his blind spot, the plaintiff was "in front of [his car] but on the left side of [Lane 3] ...". [\[note: 118\]](#) In other words, in order for me to accept the defendant's alternative case, Ms Fan invites me to disbelieve the defendant's own evidence. [\[note: 119\]](#) That is a strange, if not impermissible, submission to make.

91 In evaluating this submission, I bear in mind the rules in relation to party running two inconsistent cases in the alternative. In *Ng Chee Weng v Lim Jit Ming Bryan and another* [2012] 1 SLR 457, the Court of Appeal held that while it is permissible to run two inconsistent cases in the alternative, doing so must not offend common sense (at [36]–[37]):

36 ... [T]he alternatives cannot offend common sense... Indeed, in *Brailsford v Tobie* (1888) 10 ALT 194 ("*Brailsford*"), it was held that an exception to the general rule is that alternative statements of fact are not permitted if one statement or the other must, to the knowledge of the pleader, be false.

37 ... One obvious example of an inconsistency that will offend common sense is *when the pleader has actual knowledge of which alternative is true*, as was the case in *Brailsford*.

[emphasis added]

92 Ms Fan's inconsistent and alternative cases do offend common sense. Where the plaintiff was before the impact is a matter within the defendant's own knowledge. The defendant accepts this. He says he saw the plaintiff before turning his head to check his blind spot and the defendant was on the left side of Lane 3, at about the double yellow lines. The defendant therefore cannot run a contradictory alternative case where the contradiction lies in the plaintiff being somewhere else within Lane 3. The defendant must choose: either (i) the plaintiff was riding at or near the double yellow lines, out of the defendant's way; or (ii) the plaintiff was riding near the middle of the lane and causing an obstruction. The defendant has in fact made his choice. In his affidavit of evidence in chief (see [90] above) and in his evidence at trial (see [44] above), he is unequivocal that the plaintiff was cycling near the double yellow lines on the left of Lane 3 and out of his way. That is, of course, subject only to the sudden change of direction posited in his primary case. [\[note: 120\]](#) He cannot run an alternative case which puts the plaintiff riding in the middle of Lane 3 with no sudden change in direction.

93 That alone suffices for me to reject the defendant's alternative case.

Whether the plaintiff kept to the left of the lane

94 Nevertheless, I go on to consider the merits of the defendant's alternative case. I accept the plaintiff's evidence that that the plaintiff was riding generally on the left side of Lane 3 in the moments before the collision. All of the evidence supports that conclusion.

95 The principal evidential difficulty facing the defendant on his alternative case is his own evidence on his primary case. It is not his evidence that the plaintiff was obstructing the defendant's path for any length of time before the collision. On the contrary, the defendant's evidence is that the plaintiff was cycling on the left side of Lane 3, near the double yellow lines, until the split second before impact (see [90] above). [\[note: 121\]](#) I accept that aspect of the defendant's evidence as credible.

96 Although there are differences between the other witnesses' evidence on where exactly within Lane 3 the plaintiff was cycling, none of those witnesses gave evidence that the plaintiff was riding in a manner which obstructed the defendant's path. For example, the plaintiff's evidence is that he was riding on the left side of the lane. [\[note: 122\]](#) He was not asked by Ms Fan during his cross-examination to identify precisely the part of the lane that he was cycling on before the collision. [\[note: 123\]](#) On the contrary, in her questions to the plaintiff, Ms Fan appeared to accept that he was cycling on the left

of Lane 3. [\[note: 124\]](#) Further, while Mr Sandford did not witness the impact, [\[note: 125\]](#) it is his evidence that he and the plaintiff normally cycled towards the left of the kerbside lane, somewhere between the double yellow lines and the middle of the lane, so as to discourage cars from trying to overtake them too closely on the right, and to encourage cars instead to change lanes in order to overtake them. [\[note: 126\]](#)

97 According to Mr Johari, the closest that the plaintiff could have been to the centre of Lane 3 is 40% to the right of the double yellow lines, [\[note: 127\]](#) taking the full width of Lane 33 to be 100%. This may put the plaintiff closer to the centre of Lane 3 than both the plaintiff's evidence and the defendant's own evidence would suggest. But as Ms Fan herself points out, Mr Johari was not directly behind the plaintiff and could only see the plaintiff at an angle from Lane 2. [\[note: 128\]](#) His evidence must thus be considered in that light. Even if Mr Johari's evidence in this aspect is accurate, Ms Fan did not put it to Mr Johari that the plaintiff had been riding at or near the centre of Lane 3 from the moment he entered Brickland Road and without a change of direction. Instead, her cross-examination of Mr Johari on this point was aimed solely at getting him to admit that the plaintiff was riding at or near the centre of the lane because he had swerved suddenly from the left side of Lane 3 into the defendant's path immediately before the collision. [\[note: 129\]](#) As mentioned above at [72], Ms Fan did not challenge Mr Johari's evidence that the plaintiff and the defendant were on converging paths well before the collision. That also goes some way towards explaining why Mr Johari may have believed that he saw the plaintiff at or close to the centre of Lane 3 in the moments before the collision.

98 Therefore, in my view, Ms Fan has failed to prove the defendant's alternative case: that the plaintiff was riding in Lane 3 a manner which obstructed the defendant's path in breach of the Road Traffic (Bicycles) Rules.

Conclusion

99 For all the reasons set out above, I have found that the plaintiff did not, in the way he rode his bicycle in the seconds leading up to the fateful collision, fail to take reasonable care to guard against foreseeable harm. I therefore make no reduction to the damages recoverable by the plaintiff from the defendant. It follows that the defendant is 100% liable for the plaintiff's loss and damage. Those damages shall be assessed separately.

[\[note: 1\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 5.

[\[note: 2\]](#) Statement of Claim (3 September 2015) at para 4.

[\[note: 3\]](#) Certified Transcript (26 January 2017), p 2 (lines 15–21).

[\[note: 4\]](#) Grant Johnston's AEIC (11 October 2016) at page 24.

[\[note: 5\]](#) Agreed Bundle of Documents at pp 145–146.

[\[note: 6\]](#) Ye Xianrong's AEIC (3 October 2016) at para 6.

[\[note: 7\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 7; Sandford Christopher John William's AEIC (30 September 2016) at para 7.

[\[note: 8\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 8; Certified Transcript (4 November 2016) at pp 45 (lines 30–32) to 46 (lines 1–6); Certified Transcript (8 November 2016) at p 9 (lines 24–28).

[\[note: 9\]](#) Ye Xianrong's AEIC (3 October 2016) at para 9.

[\[note: 10\]](#) Ye Xianrong's AEIC (3 October 2016) at paras 10–11, and 13.

[\[note: 11\]](#) Ye Xianrong's AEIC (3 October 2016) at para 14.

[\[note: 12\]](#) Ye Xianrong's AEIC (3 October 2016) at para 15.

[\[note: 13\]](#) Ye Xianrong's AEIC (3 October 2016) at para 17.

[\[note: 14\]](#) Certified Transcript (4 November 2016) at p 22 (lines 11–13).

[\[note: 15\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 9.

[\[note: 16\]](#) Certified Transcript (8 November 2016) at p 51 (lines 17–18).

[\[note: 17\]](#) Certified Transcript (8 November 2016) at pp 52 (lines 9–10) and 66 (lines 1–4).

[\[note: 18\]](#) Ye Xianrong's AEIC (3 October 2016) at p 31.

[\[note: 19\]](#) Ye Xianrong's AEIC (3 October 2016) at para 25 and pp 31, 80–81.

[\[note: 20\]](#) Ye Xianrong's AEIC (3 October 2016) at para 27.

[\[note: 21\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 15.

[\[note: 22\]](#) Ye Xianrong's AEIC (3 October 2016) at para 15.

[\[note: 23\]](#) Certified Transcript (9 November 2016) at p 56 (lines 20–25).

[\[note: 24\]](#) Certified Transcript (4 November 2016) at p 60 (lines 23–30).

[\[note: 25\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 12 and 17.

[\[note: 26\]](#) Certified Transcript (8 November 2016) at p 15 (lines 2–9).

[\[note: 27\]](#) Certified Transcript (8 November 2016) at p 14 (lines 1–25).

[\[note: 28\]](#) Johari Bin Samsuri's AEIC (9 March 2015) at para 5.

[\[note: 29\]](#) Johari Bin Samsuri's AEIC (9 March 2015) at para 5.

[\[note: 30\]](#) Certified Transcript (4 November 2016) at pp 115 (lines 14–32) and 116 (lines 1–4).

[\[note: 31\]](#) Christopher Sandford’s AEIC (30 September 2016) at page 8 to 11.

[\[note: 32\]](#) Certified Transcript (4 November 2016) at p 57 (lines 31–32).

[\[note: 33\]](#) Agreed Bundle of Documents at pp 125–126.

[\[note: 34\]](#) Exhibit D2; Certified Transcript (8 November 2016) at p 68 (lines 10–22).

[\[note: 35\]](#) Agreed Bundle of Documents at p 219.

[\[note: 36\]](#) Agreed Bundle of Documents at pp 284–285.

[\[note: 37\]](#) Certified Transcript (9 November 2016) at p 147 (lines 19–32).

[\[note: 38\]](#) Defence (16 October 2015) at para 9.

[\[note: 39\]](#) Certified Transcript (9 November 2016) at p 110 (lines 3–6).

[\[note: 40\]](#) Certified Transcript (9 November 2016) at p 109 (lines 14–16).

[\[note: 41\]](#) Certified Transcript (26 January 2017) at p 2 (lines 15–21).

[\[note: 42\]](#) Plaintiff’s Closing Submissions (9 January 2017) at para 2.2; Defendant’s Closing Submissions (6 January 2017) at section Q.

[\[note: 43\]](#) Certified Transcript (26 January 2017) at p 7 (lines 1–20).

[\[note: 44\]](#) Defendant’s Closing Submissions (6 January 2017) at para 21(b).

[\[note: 45\]](#) Defendant’s Closing Submissions (6 January 2017) at para 21(c).

[\[note: 46\]](#) Plaintiff’s Closing Submissions (9 January 2017) at paras 5.3 and 5.9.

[\[note: 47\]](#) Plaintiff’s Reply Submissions (20 January 2017) at para 11.11.

[\[note: 48\]](#) Plaintiff’s Closing Submissions (9 January 2017) at paras 4.1.2 to 4.1.4.

[\[note: 49\]](#) Certified Transcript (26 January 2017) at p 51 (lines 4–10).

[\[note: 50\]](#) Defendant’s Reply Submissions (26 January 2017) at para 61; Certified Transcript (9 November 2016) at p 128 (lines 8–10).

[\[note: 51\]](#) Certified Transcript (26 January 2017) at p 51 (lines 4–10).

[\[note: 52\]](#) Plaintiff's table tendered during oral submissions (26 January 2017) at pp 2–3.

[\[note: 53\]](#) Certified Transcript (9 November 2016) at p 41 (lines 28–30).

[\[note: 54\]](#) Certified Transcript (9 November 2016) at p 42 (lines 4–8).

[\[note: 55\]](#) Certified Transcript (9 November 2016) at p 41 (lines 28–30).

[\[note: 56\]](#) Certified Transcript (9 November 2016) at p 56 (lines 19–21).

[\[note: 57\]](#) Certified Transcript (9 November 2016) at p 129 (lines 8–21).

[\[note: 58\]](#) Exhibit P3F2.

[\[note: 59\]](#) Certified Transcript (26 January 2017) at p 37 (lines 8–17).

[\[note: 60\]](#) Certified Transcript (26 January 2017) at pp 37 (lines 31–32) and 38 (line 1).

[\[note: 61\]](#) Defendant's Closing Submissions (6 January 2017) at para 241.

[\[note: 62\]](#) Christopher Sandford's AEIC (30 September 2016) at para 10.

[\[note: 63\]](#) Certified Transcript (9 November 2016) at p 38 (lines 9–12); Defendant's Closing Submissions (6 January 2017) at para 245.

[\[note: 64\]](#) Exhibit P3F2.

[\[note: 65\]](#) Exhibit P3F2.

[\[note: 66\]](#) Ye Xianrong's AEIC (11 October 2016) at p 21.

[\[note: 67\]](#) Ye Xianrong's AEIC (11 October 2016) at p 35, para 10.

[\[note: 68\]](#) Ye Xianrong's AEIC (11 October 2016) at p 56, para 5.

[\[note: 69\]](#) Ye Xianrong's AEIC (11 October 2016) at p 80, para 4.

[\[note: 70\]](#) Defendant's Closing Submissions (6 January 2017) at para 233; Certified Transcript (9 November 2016) at p 88 (lines 11–27).

[\[note: 71\]](#) Certified Transcript (9 November 2016) at p 89 (lines 14–16).

[\[note: 72\]](#) Plaintiff's Closing Submissions (9 January 2017) at para 5.18.4; Plaintiff's Reply Submissions (20 January 2017) at para 11.11.

[\[note: 73\]](#) Ye Xianrong's AEIC (3 October 2016) at paragraph 15.

[\[note: 74\]](#) Grant Johnston's AEIC (11 October 2016) at page 8.

[\[note: 75\]](#) Certified Transcript (26 January 2017) at p 24 (lines 13–14).

[\[note: 76\]](#) Certified Transcript (26 January 2017) at p 51 (lines 9–12).

[\[note: 77\]](#) Johari Bin Samsuri's AEIC (9 March 2015) at para 5.

[\[note: 78\]](#) Plaintiff's Closing Submissions (9 January 2017) at para 5.7.

[\[note: 79\]](#) Defendant's Closing Submissions (6 January 2017) at para 184; Certified Transcript (4 November 2016) at p 138 (lines 21–23).

[\[note: 80\]](#) Certified Transcript (4 November 2016) at p 112 (lines 26–31).

[\[note: 81\]](#) Certified Transcript (4 November 2016) at p 114 (lines 19–25).

[\[note: 82\]](#) Certified Transcript (4 November 2016) at p 140 (lines 1–2).

[\[note: 83\]](#) Certified Transcript (4 November 2016) at p 145 (lines 4–5).

[\[note: 84\]](#) Defendant's Closing Submissions (6 January 2017) at para 173.

[\[note: 85\]](#) Agreed Bundle of Documents at pp 225 and 284–285.

[\[note: 86\]](#) Certified Transcript (9 November 2016) at pp 59 (lines 31–32) to 60 (lines 1–3).

[\[note: 87\]](#) Agreed Bundle of Documents at p 237.

[\[note: 88\]](#) Certified Transcript (10 November 2016) at p 37 (lines 19–21).

[\[note: 89\]](#) Certified Transcript (10 November 2016) at p 38 (lines 20–29).

[\[note: 90\]](#) Defendant's Closing Submissions (6 January 2017) at para 146.

[\[note: 91\]](#) Agreed Bundle of Documents at p 299.

[\[note: 92\]](#) Agreed Bundle of Documents at pp 193 and 256.

[\[note: 93\]](#) Agreed Bundle of Documents at pp 139–209 and 210–271.

[\[note: 94\]](#) Agreed Bundle of Documents at pp 273–328.

[\[note: 95\]](#) Agreed Bundle of Documents at p 307.

[\[note: 96\]](#) Agreed Bundle of Documents at pp 305–307.

[\[note: 97\]](#) Agreed Bundle of Documents at p 272.

[\[note: 98\]](#) Certified Transcript (9 November 2016) at p 147 (lines 29–31).

[\[note: 99\]](#) Agreed Bundle of Documents at p 177; Certified Transcript (9 November 2016) at p 179 (lines 22–23).

[\[note: 100\]](#) Certified Transcript (10 November 2016) at p 21 (lines 1–7).

[\[note: 101\]](#) Certified Transcript (10 November 2016) at pp 34 (lines 19–32) and 35 (lines 1–10).

[\[note: 102\]](#) Agreed Bundle of Documents at p 176.

[\[note: 103\]](#) Agreed Bundle of Documents at p 176.

[\[note: 104\]](#) Defendant’s Closing Submissions (6 January 2017) at paras 159–209.

[\[note: 105\]](#) Defendant’s Closing Submissions (6 January 2017) at para 93.

[\[note: 106\]](#) Defendant’s Closing Submissions (6 January 2017) at paras 91–92.

[\[note: 107\]](#) Certified Transcript (9 November 2016) at p 148 (lines 10–19).

[\[note: 108\]](#) Agreed Bundle of Documents at p 231.

[\[note: 109\]](#) Plaintiff’s Reply Submissions (20 January 2017) at para 9.19.

[\[note: 110\]](#) Certified Transcript (10 November 2016) at pp 61–69.

[\[note: 111\]](#) Defendant’s Closing Submissions (6 January 2017) at para 158.

[\[note: 112\]](#) Defendant’s Closing Submissions (6 January 2017) at para 160.

[\[note: 113\]](#) Plaintiff’s Reply Submissions (20 January 2017) at para 9.28; Certified Transcript (10 November 2016) at p 35 (lines 1–10).

[\[note: 114\]](#) Plaintiff’s Reply Submissions (20 Jan 2017) at paras 9.25 and 9.27; Certified Transcript (26 January 2017) at p 30 (lines 4–7).

[\[note: 115\]](#) Plaintiff’s Reply Submissions (20 January 2017) at para 9.25.

[\[note: 116\]](#) Plaintiff’s Reply Submissions (20 January 2017) at para 9.27.

[\[note: 117\]](#) Ye Xianrong’s AEIC (3 October 2016) at para 10.

[\[note: 118\]](#) Ye Xianrong's AEIC (3 October 2016) at para 13.

[\[note: 119\]](#) Certified Transcript (26 January 2017) at p 92 (lines 15–26).

[\[note: 120\]](#) Defence (16 October 2015) at para 3.

[\[note: 121\]](#) Defendant's Closing Submissions (6 January 2017) at para 116; Defendant's Reply Submissions (20 Jan 2017) at para 62.

[\[note: 122\]](#) Christian Joachim Pollmann's AEIC (4 October 2016) at para 8.

[\[note: 123\]](#) Plaintiff's Reply Submissions (20 January 2017) at para 9.8.

[\[note: 124\]](#) Certified Transcript (4 November 2016) at pp 50 (lines 23–24), 51 (lines 29–32), and 52 (lines 7–9).

[\[note: 125\]](#) Certified Transcript (8 November 2016) at pp 14 (lines 31–32) to 15 (line 1).

[\[note: 126\]](#) Certified Transcript (8 November 2016) at pp 9 (lines 24–27), 10 (lines 13–18), and 11 (lines 1–3).

[\[note: 127\]](#) Certified Transcript (4 November 2016) at p 137 (lines 2–4).

[\[note: 128\]](#) Defendant's Closing Submissions (6 January 2017) at para 183.

[\[note: 129\]](#) Certified Transcript (4 November 2016) at p 165 (lines 7–12).