C A N A D A

PROVINCE OF QUÉBEC

DISTRICT OF MONTREAL

(Class Action)

SUPERIOR COURT

No: 500-06-001018-197

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Tracey Arial, Claire O'Brien, Erika and Zoe Patton, Alex Tasciyan, Mathew Nucciaroni and Vito DeCicco

Plaintiffs/Applicants

vs.

Apple Canada Inc. Apple inc,, Samsung Electronics Canada and Samsung Electronics co. ltd.

Respondents

Introduction:

Plaintiffs propose three (3) syllogisms:

1. Cellphone models, including certain Defendants' models, when tested using the advertised separation distance emit EMF/SAR in excess of the FCC limit of 1,6 W/kg. This constitutes false advertising. Defendants are well aware of this fact.
2. Cellphone models, including all tested Defendants' models, when tested as used (i.e. separation distance of 2 mm or less) exceed the FCC limit of 1,6 W/kg by up to five (5) times [1]. This constitutes a failure to warn, a failure to inform, and the intentional marketing of an inherently dangerous product.
3. Defendants' actions and omissions detailed above cause serious health risks to humans and the environment. The risks constitute a breach of fundamental rights and the *Charters and*

[1] "ANFR Mobile Phone SAR" data is as published by France's national radiofrequency regulator (*Agence Nationale des Frequences*). data are available on the ANFR website: (https://data.anfr.fr/anfr/visualisation/export/?disjunctive.marque&disjunctive.modele&sort=marque)

justify the awarding of punitive damages. This matter concerns the *quantum* of damages due to class members and is a matter for the Merits.

Applicants' Notes and Authorities re Apple's Application for Leave to Adduce Evidence:

1. Applicants claim that Defendants' phones, when tested (i) "as advertised"; (ii) *as actually used, which is to say a separation distance of less than 5 mm from the antenna*, do not meet the FCC SAR limit of 1.6 W/kg, and (iii) are not safe to use. Reference is made to four (4) sets of test results: Chicago Tribune 2019 tests (**Exhibit P-3A**), CBC Marketplace 2017 tests (**Exhibit P-3B**), French national testing authority data *Agence nationale des fréquences* (ANFR, **Exhibit P-3C**) as analyzed by the French national safety regulator *l'Agence nationale de sécurité sanitaire de l'alimentation de l'environnement et du travail* (ANSES**, Exhibit P-3D**) (data released by ANFR in March, 2018 following legal action in the French Court), and (iv) Penumbra 2019 iPhone 11 SAR test report (**Exhibits P-3HA & P-3HB)**, also summarized in Gregorio Report, **Exhibit P-3G**. These results indicate that the SAR levels indicated by the phones themselves, in user manuals and on Defendants' websites are intentionally misleading, constitute false advertising, and fail to warn of a significant risk to life and security of person.
2. In order to show that this is not an insignificant breach, and to quantify class members' damages, Applicants indicate the severity of the false advertising and failure to warn, alleging EMF pollution to human health and the environment. This secondary issue is relevant at the Merits stage only.
3. In this regard Applicants have created a spreadsheet which lists Defendants' Exhibits, groups them by category, and explains relevance to Syllogisms 1 and 2 Authorization (or at any stage).

Exhibit #	Grouping	Argument Relevance	Reference
Apple 12	Alsup, J. *Order* rendered in *Cohen vs Apple*	Dismissed on preemption doctrine	No such legal challenge to jurisdiction is available in Quebec. Improper factual determinations.
Samsung 20	Incorrectly Interprets "Safety Code" 6	Compliance not health is within ISED's jurisdiction Unreliable Syllogism 3 merits Disguised Expertise A defense	Gregorio Affidavit Havas Report P-3 F

4. Plaintiffs oppose the production of Apple **Exhibit APL-12** Alsop J., October 20, 2021 for a number of reasons. The justification advanced by Apple is that this Honorable Court has allowed Apple to file of other Court documents from the California proceedings, Art. 55, *Regulation of the Superior Court*, completeness and proportionality.

5. At para. 57 of your Lordship's June 18, 2020 Decision allowing the production of **Exhibits APL 9-11**, your Lordship held that the Application (APL-10) was, essentially, a Collective Action Application, and that **APL- 9** and **11** were useful in helping the Court understand the involvement of the FCC in that matter. With respect, Plaintiffs argue **APL-12** is prejudicial, misleading, irrelevant and should not be allowed at this stage. Furthermore, **APL-12** is not "[An] application for authorization to bring a class action" within the meaning of the rule, nor is it useful for this Honorable Court at Authorization.

6. Page 2 1ines 19-21 of the Alsup, J *Order* frame those proceedings as selling phones that do not comply with FCC RF emission standards. In this case that is true for compliance but not

for safety. The Gregorio **Affidavit**, in Annex, explains at paragraphs 44 to 47 that a myriad of head positions, antenna location, absorption and reflection of RF, metal objects like a hand clasp, earrings or a ring (environment) significantly distinguish laboratory testing from actual user exposure. Cell phone power modulation in actual use is another untested factor. FCC and ISED acknowledge SAR variability as a measurement concern but fail to address it in terms of user exposure. As humans make testing complex, regulators allow testing on a mannequin. An infinite array of actual use positions are not tested as regulators allow device makers to test in in a small set of pre-determined positions. That laboratory testing is inconsistent with actual use is illustrated in the 4 data sets summarized in Gregorio **Exhibit P-3G**, incorporating data from **P-3A** (Chicago Tribune), **Exhibit P-3B**, (CBC Marketplace), **Exhibit P-3C** (France's Agence National de Fréquences), **Exhibit P-3D** (France's Agence Nationale de Sécurité Sanitaire) and, as concerns laboratory testing of the iPhone 11 Pro at 5mm, **Exhibits P-3HA and P-3HB)**. It is therefore suggested that the Honorable Mr. Justice Alsop was misled as concerns the subject matter of the claim. As such, the text of the *Order* **APL-12** includes factual inaccuracies, is misleading, and is not relevant for Authorization in the present matter. **APL-12** (the *Order*) should not be considered a defense.

7. Page 4, paragraph 3 lines 11 and 12 of the Alsup, J *Order*: "The Commission has determined that all certified cellphones pose no health risks." That statement is, with respect, categorically false. As explained in detail below, the FCC, unlike Health Canada, has a dual mandate of promoting the cellular industry and protecting health. This mandated balancing of two sometimes conflicting responsibilities requires them to accept a certain health risk (our Syllogism 3). The distinct Canadian regulatory context is described in paragraphs 6 to 10 of

the Gregorio **Affidavit** at paragraph 11 below. We claim, in syllogisms 1, 2, and 3 that Defendants' RF exceeds the safety exposure standard, and even more so in actual use;

8. Page 8, lines 3-4 of the Alsup, J *Order* cites the FCC RF Order reference to "large safety margins built into existing requirements". At page 8, paragraph 2, last 3 lines of the Alsup, J *Order* states: "The RF exposure from each of the iPhones measured fell well within the safety margins. The lab found no violations of the technical standards". At page 8, lines 9-10 describes FCC iPhone lab results as "well within safety limits". The Samsung Galaxy S-8 body tested by the Chicago Tribune **Exhibit P-3A** produced results 5 times higher than the standard, measuring 8.22 W/kg. Similarly, the Apple iPhone 11 Pro was tested by Penumbra at more than twice the legal limit **Exhibit P-3HB.** Page 8 lines 2-3 refers to "Large safety margins". These terms are nowhere defined or explained. Furthermore, the references in **Exhibit S-20** pp. 9, 13, & 17 to "safety margins of at least 50-fold" are extremely self-serving as ISED presents safety analysis out of context and beyond their area of expertise, as explained in further detail at Para. 14 of Applicants' Notes and Authorities as concerns Samsung's Motion to Adduce Relevant Evidence (Applicants' Notes and Authorities re: Samsung).

9. The first 4 lines at page 16 of the Alsup, J *Order* frame the California Class Action as being limited to a subset of our Syllogism 1. In the California proceedings Plaintiffs argue "neither the FCC RF emissions standards nor the FCC testing procedures will be called into question" and that Plaintiffs' claims do not turn on the issue of test separation distance. Each and every claim supposedly relies on the alleged fact that even at 5 mm Plaintiffs' iPhones do not meet the Commission's RF exposure standards." This description is inapt to the present proceedings. First, syllogism 1 is more than just distance – it also has to do with position and the test criteria, like a hand, metal, position, and environmental change including modulation. See **Gregorio**

Affidavit at paras. 44 and 45. At paragraphs 47 and 48 of the **Affidavit**, Mr. Gregorio indicates that rather than requiring a wide range of testing positions to capture maximum exposure scenarios, regulators allow cell phone makers to use three (3) standardized test positions: (cheek and tilt) and one for the body. Position is therefore as much an issue as is distance. As noted at paragraph 63 of the Gregorio **Affidavit**, Defendants show greater interest in protecting the validity of their testing methods, results and compliance status than in protecting consumers health in valid yet unorthodox use cases. That paragraph reproduces Apple iPhone 7 Exposure Information indicating that cases with metal parts, and implicitly all metal in close proximity, "may change the RF performance of the device including its compliance with RF exposure guidelines, in a manner that is not been tested or certified" (**Exhibit APL-4** at para. 3 line 2). Furthermore, by use of the term "simulates" to describe the testing regimen in its user manuals, **Exhibit APL-4,** Apple misrepresents what actually occurs, which is at very best an extremely poor simulation of human exposure.

10. In addition, the Gregorio **Affidavit** at paragraphs 59 to 61 discusses the strong likelihood of "defeat devices" being employed during Laboratory testing such that the claim that cell phones are tested at full power is a false declaration. Evasive responses from Motorola concerning the Chicago Tribune tests led to the confirmation by Motorola that the first test results suggested power sensors in the phone designed to reduce power when near the head failed to detect the user. Reduction of power output during testing and only by application of a special, secret, test method may not be inconsistent with US regulations as indicated at paragraph 61 of Gregorio **Affidavit**. "The latest FCC SAR Evaluation Considerations implicitly allow for such techniques that reduce transmitter power during SAR compliance testing".

11. Page 16 lines 8-10 of the Alsup, J *Order* clearly indicate that it was governed by the doctrine of preemption in that the FCC was accorded deference as concerns their exclusive mandate to balance "competing objectives of safety and efficiency". Canada does not balance health with promoting industry. At paragraphs 6 to 10 of the Gregorio **Affidavit** the Canadian regulatory framework is distinguished from that of the United States in that Canada has no similar balancing. The licensing and regulation of EMF emitting devices, including cellular telephones, are regulated through ISED, whereas Health Canada establishes limits for human exposure to radiofrequency fields.
12. Also of note, as indicated at para. 48 of the Gregorio **Affidavit**: "Regulators advise device makers may select a preferred separation distance for testing. Recently, Apple typically tests at 5 mm. separation distance for iPhone products while Samsung generally tests their Galaxy handsets at 15 mm. separation distance."

13. Page 19 lines 1-4 of the Alsup, J *Order* cite the FCC 2019 RF Order which concluded that "even if certified or otherwise authorized devices produce RF exposure levels in excess of Commission limits under normal use, such exposure would still be well below levels considered to be dangerous, and therefore phones legally sold in the United States pose no health risks."

14.

That determination would not apply in Canada because ISED cannot make health statements. Health Canada only relies on Safety Code 6 "as a convenience". This analysis is made in the Gregorio **Affidavit** at paras. 7 and 8, noted above and in greater detail at paras. 36 and 37 which indicate that "Health Canada has established basic restrictions, which are independent of testing methodologies, to protect citizens from *acute thermal only* effects of RF emissions…". Whereas

ISED “has adopted the SAR and RF field strength limits adopted in Health Canada’s RF exposure guideline Safety Code 6”. Health Canada does not establish separation distances –and allows phone manufacturers to set test distance except for “body worn devices”. Samsung fails the body worn device separation distances of 5 mm. as they only test at 15 mm. as noted in the Gregorio **Affidavit** at para 40. The acute relevance of these distances is explained at para. 41 of the **Affidavit** citing Gandhi who states that SAR can increase 30% per mm of separation distance reduction below 5 mm separation distance;

15. Even if *Order* **Exhibit APL-12** is relevant to these proceedings**,** at page 22 lines 27-28 to page 23 line 3 Justice Alsop clearly indicates that despite preemption, false advertising claims remain available pursuant to state consumer protection law re providing false and misleading information as well as material and omitting material information about their cell phones.
16. Page 27 lines 14-15 gives the false impression Apple iPhones passed when tested at 5 mm by Chicago Tribune. When they were retested following conversations with the manufacturer – they again failed at 5 mm. The iPhone X initially passed then subsequently failed at 5 mm. This discovery is described in Gregorio **Affidavit** Paras. 53-54;
17. Should the claim that Apple iPhones passed when tested at 5 mm by Chicago Tribune be relied upon by Apple at Authorization, this would be disguised expertise alleged prematurely. To the extent it would be relied upon to put in question the veracity of the Chicago Tribune testing or Applicants’ other three data sets, it would constitute a defense, also not relevant at Authorization;
18. Petitioners do not just say that RF radiation exceeds FCC safety standards. We say (1) It exceeds what the manufacturer advertises. When the testing is done properly, and not “diesel-gated” it fails by a wide margin; (2) When tested as cellular phones are actually used, SAR for

Defendants' handsets exceeds the FCC limit of 1.6 W/kg as much as fivefold as confirmed by Om Gandhi.[3]

> *"Expecting that the SARs for cell phones may exceed the safety limits for body contact, cell phone manufacturers have started to recommend that the devices can be used at 5-25 mm from the body even though it is difficult to see how to maintain this distance correctly under mobile conditions. …most cell phones will exceed the safety guidelines when held against the body by factors of 1.6-3.7 times for the European/ICNIRP standard or by factors as high as 11 if 1-g SAR values were to be measured as required by the U.S. FCC."*

19. The report by the Chicago Tribune in August (22nd) 2019 indicates that certain smartphone models emit RF radiation that exceeds safety standards set by the FCC. The Tribune article (Exhibit P-3A) indicates at pages 9 to 12 that in almost all scenarios (even after "Diesel-gating" by the manufactures) the 1.6 W/kg FCC SAR limit is breached (see Standard test results). Exhibit P-3A further indicates that when tested at 2 millimeters separation distance, estimated to be the exposure when carrying a phone in a pocket, the breach is considerably worse (Modified tests). Chicago *did not* test at zero millimeters, which would be actual use.
20. **Exhibit APL-12** may be invoked to invalidate the Chicago Tribune test results, as well as three other data sets leading to the same conclusions. Were relevant, it would be so for the Merits.
21. In the *Order* in *Cohen et al v. Apple Inc. et al* (U.S. District Court, California Northern District (San Francisco), CIVIL CASE #: 3:19-cv-05322-WHA), the Honorable Mr. Justice Alsop, applies the decisions in *Murray v Motorola* 982 A. 2d 764, 789 (D.C. 2009) and *Farina v Nokia inc.* 625 F. 3d 97 (3rd Cir. 2010) deferring to FCC's rulemaking with respect to RF emissions and dismisses for preemption. The *Order* is completely irrelevant to the present matter as FCC preemption does it apply and in in no way impairs Quebec's Collective Action jurisdiction, nor the Quebec *Consumer Protection Act*. No deference is due the FCC in Quebec or Canada.

[3] Supra note 1.

22. There is also reason to believe that the Order may be overturned on appeal as, in the United States, preemption does not bar all state tort (delict) claims: "The FCC's RF regulations preempted a state tort suit where the plaintiff, in order to prevail, would have to show that the FCC's standards were "insufficiently protective of Public health and safety" *Farina v Nokia* at pages 126-7. To be certified the *Cohen* Plaintiffs may now have to prove our Syllogism 2 and/or 3. It is respectfully submitted that in Quebec, Syllogisms 1 and/or 2 suffice for Authorization under the *Consumer Protection Act* and the *Civil Code*.
23. As stated, the extent and degree of health damages from RF radiation are relevant to the *quantum* of damages available for false advertising, and failure to inform consumers of risks and negligence. This is a matter for the Merits.
24. Another distinction of note between the California proceedings and ours is indicated in **Exhibit APL-5** *en liasse.* Applicants' claim of misinformation relates to these values, amongst others. This relates to Syllogisms 1 and 2.
25. Defendants claim to have met the Industry Canada limit, but the documents purporting to show this do not disclose a Compliance Distance in 75% of the documents filed in **APL- 5** *en liasse*. Each Applicant's specific allegation concerns the warnings and information on their phones, all of which refer to FCC SAR levels. The information is reproduced in the Report of Pedro Gregorio, produced as **Exhibit P-3 G**;
26. Every one of **Exhibit APL-5** reports prior to 2018 does NOT list a certification distance. Reports start listing the certification distance in Sept 2018; that accounts for 25% of the reports. None of the test reports list test distance. They claim compliance to a distance, but do not provide details of the test distance:

Model	Model Name	Compliance distance listed	Measured Distance	Approval Date	Date Modified
A1428		N	N		
A1429		N	N		
A1453	5S	N	N		
A1456	5C	N	N		
A1457	5S	N	N		
A1507	5C	N	N		
A1522	6 PLUS	N	N		
A1524	6 PLUS	N	N		
A1529	5C	N	N		
A1530	5S	N	N		
A1532	5C	N	N		
A1533	5S	N	N		
A1549	6	N	N		
A1586	6	N	N		
A1633	6S	N	N		
A1634	6S PLUS	N	N		
A1660	7	N	N		
A1661	7 PLUS	N	N		
A1662	SE	N	N		
A1687	6S PLUS	N	N		
A1688	6S	N	N		
A1699	6S PLUS	N	N		
A1700	6S	N	N		
A1723	SE	N	N		
A1724	SE	N	N		

A1778	7	N	N		
A1784	7 PLUS	N	N		
A1863	8	N	N		
A1864	8 PLUS	N	N	08-Sep-17	
A1865	X	N	N	20-Sep-17	
A1897	8 PLUS	N	N	08-Sep-17	
A1901	X	N	N	15-Sep-17	
A1905	8	N	N	08-Sep-17	27-Nov-19
A1920	XS	5	N	05-Sep-18	28-Nov-19
A1921	XS MAX	5	N	06-Sep-18	28-Nov-19
A1984	XR	5	N	19-Sep-18	28-Nov-19
A2097	XS	5	N	05-Sep-18	28-Nov-19
A2099	XS	5	N	05-Sep-18	28-Nov-19
A2101	XS MAX	5	N	05-Sep-18	28-Nov-19
A2103	XS MAX	5	N	05-Sep-18	28-Nov-19
A2105	XR	5	N	19-Sep-18	28-Nov-19
A2111	11	5	N	29-Aug-19	28-Nov-19
A2160	11 Pro	5	N	29-Aug-19	28-Nov-19
A2161	11 Pro	5	N	30-Aug-19	28-Nov-19

Exhibit APL-5 *en liasse* indicates the omission on the part of Apple that claimed separation distance/Compliance Distance is reliable and veritable. At which distance the SAR levels were tested is nowhere indicated (75% of models list no “Certification Distance” while 100% of models specify no testing distance data), therefore suggesting Apple’s SAR attestations are wholly unreliable. Invoking **Exhibit APL-12** to contradict this would be premature as it is a defense;

Applicants invoke three (3) objections to the production of **Exhibit APL-12**:

1. The U.S. and Canada have different legal regimes. The FCC is mandated to balance health and "efficiency", whereas Canada has a separation of responsibilities: Health Canada "establish[es] safety limits for human exposure to radiofrequency fields" and ISED licenses and regulates EMF emitting devices such as mobile cellular consumer products.
2. Mr. Justice Alsup's *Order* applies the U.S. preemption doctrine which is neither relevant nor applicable in Canada.
3. Many of the statements in that *Order* are inaccurate, misleading, or untrue.

27. Only essential and indispensable proof is permitted to Defendants and only as concerns the syllogism(s). "Completing the factual context is not a ground" *Bouchard c. Bank of Montréal* 2019 QCCS 5661 paras. 42+43 (Carl Thibault JCS), *Lauzon c Municipalité (MRC) de Deux Montagnes*, 2019 QCCS 4650 CanLii, Bisson, J. at paras. 38 page 13, and at para. 72, page 19 citing and applying *Asselin c Desjardins* 2017 1673 (paras. 37-45) and *Primo Bedding Company c. Air Canada* 2019 QCCS 1671 Duprat, J., pp. 6-7 paras 13ff.

28. Prudence is required. *Agostino* cited in *Desaunettes c. Réseau de Transport métropolitain (Exo)*, Gagnon J., 2019 QCCS 1894 para 94, p. 14. The proof must be « succinct and concise ». *Lauzon c Municipalité (MRC) de Deux Montagnes*, 2019 QCCS 4650 CanLii, Bisson, J. at paras. 48 page 15. It is preferable that in addition to succinct and precise, where the proposed proof has potentially significant consequences, it becomes essential and indispensable, fitting the narrow corridor. *Lauzon c Municipalité (MRC) de Deux Montagnes*, 2019 QCCS 4650 CanLii, Bisson, J. para. 88 page 23.

29. Should a Judge be presented contradictory facts, he or she is to assume, nonetheless, the facts as alleged for Authorization are true. *Lauzon c Municipalité (MRC) de Deux Montagnes*, 2019 QCCS 4650 CanLii, Bisson, J. at para. 38 p. 13;
30. The proposed Exhibit does not assist in the assessment of Applicants' Syllogisms 1 and 2 and as the exhaustive factual claim is not before the Court, now is not the time for **Exhibit-APL 12** to be considered, *Lauzon c Municipalite (MRC) de Deux Montagnes*, 2019 QCCS 4650 para. 61-62, p. 17;
31. Apple fails to provides *specific* arguments as to why the proposed proof is relevant at Authorization, nor how all or any of it relates to Plaintiffs' Syllogisms. Such specificity is absolutely required. *Primo Bedding Company c. Air Canada* 2019 QCCS 1671, Hon. Mr. Justice Duprat, p. 8 para. 17, re discovery;
32. Should Apple seek to litigate the merits of the present matter *and* preemption, as per *Cohen,* on Authorization, they are foreclosed from doing so. In our May 22, 2020 hearing concerning the relevance of Apple's proposed evidence, their attorney clearly stated that Apple did not intend to rely upon the preemption doctrine in the present matter.

Respectfully submitted this 8th day of December 2021

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