SUPERIOR COURT

(Class Action)

CANADA
PROVINCE OF QUEBEC
DISTRICT OF MONTREAL

No.: 500-06-001018-197

DATE: SEPTEMBER 22, 2022

BY THE HONOURABLE CHRISTIAN IMMER, J.S.C.

TRACEY ARIAL
and
CLAIRE O'BRIEN
and
ERIKA PATTON
and
ZOE PATTON
and
ALEX TASCIYAN
and
MATHEW NUCCIARONE
and
VITO DECICCO
Plaintiffs

v.

APPLE CANADA INC.
and
APPLE INC.
and
SAMSUNG ELECTRONICS CANADA
and
SAMSUNG ELECTRONICS CO. LTD.
Defendants

JI0082

JUDGMENT
On the Re-re amended application to authorize the bringing of a class action
And to appoint the status of representative plaintiff

OVERVIEW

[1] The seven Plaintiffs have owned, leased or used various iPhones and Samsung Phones over the years. They are convinced that Apple and Samsung phones do not meet regulatory requirements, that they constitute a health risk and that Apple and Samsung are hiding this from consumers. They also believe that the regulatory standards developed by a regulator "embedded" with the industry are grossly inadequate. According to them, radiofrequency radiation emitted by cellphones is a "toxic and addictive pollutant" and they are being exposed to "harmful levels of radiofrequency radiation".

[2] In their Application,[1] they are asking the Court to authorize them to institute a class action on behalf of the following class:

> All persons at any time residing in the Province of Quebec who purchased, leased and/or used the Phones, namely, iPhone 5s, iPhone 5C, iPhone 6, iPhone 6s, iPhone 6s Plus, iPhone SE, iPhone 7, iPhone 7 plus, iPhone 8, iPhone 8 Plus, iPhone X, iPhone XR, iPhone XS, iPhone, XS Max, iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, Samsung Galaxy S7, Samsung Galaxy S8, Samsung Galaxy S9, Samsung Galaxy J3, Samsung Galaxy S20 [...] and all additional Samsung models sold from 2013 forward, and any other phones sold or marketed by Defendants from 2013 forward.

[3] When in reception or sending mode, cellphones emit radiofrequency ("RF") radiation. Scientists continually study the effect of this radiation on animals and humans. They are concerned with the thermal effects (localized heating and stimulation of excitable nervous tissue) as well as other adverse or non-thermal effects (human cancers;

---

[1] Their Motion for authorization to institute a collective action and to obtain the status of representative was initially instituted in September 2019. It then underwent several modifications. The last version, the Re-amended motion for authorization to institute a collective action and to obtain the status of representative was filed on April 1, 2022 on the second day of the hearing [hereinafter the "**Application**"].

rodent lifetime mortality; tumor initiation, promotion and co-promotion; mutagenicity and DNA damage; EEG activity; memory, behaviour and cognitive functions; gene and protein expression; cardiovascular function; immune response; reproductive outcomes; and perceived electromagnetic hypersensitivity among others).

[4] In 2015, Health Canada, after an extensive review of existing scientific literature (including certain of the studies filed as exhibits by Plaintiff), concluded that thermal effects of RF exposure from cell phones were a concern. RF exposure is measured by the Specific Absorption Rate ("SAR"). According to Health Canada, for the head, neck and trunk, the SAR level should not exceed 1.6W/kg, calculated on 1 gr. of tissue.

[5] Based on this same review of scientific literature, Health Canada was of the view that there was no scientific basis for the occurrence of acute, chronic and/or cumulative adverse health risks from RF field exposure at levels below 1.6 W/kg per 1 g of tissue for head, neck and trunk.

[6] Manufacturers who wish to import or distribute cellphones in Canada must have their cellphones certified by Canada's department of Innovation, Science and Economic Development ("ISED"). For phones to be certified, they must be tested by an approved laboratory according to a protocol designated by regulation. It is the thermal effects of the phones that are measured. ISED warrants at what distance from the head, neck or trunk the phone must be tested and it adopts the maximum SAR limit of Health Canada of 1.6 W/kg per 1 g of tissue.

[7] ISED considers that all applicable standards have been met and all the above mentioned phones are certified.

[8] Despite these certifications, Plaintiffs invoke a myriad of statutory dispositions drawn from the *Civil Code of Quebec*, the *Consumer Protection Act* ("CPA"),[2] the *Environment Quality Act* ("EQA")[3] and the Quebec *Charter of Human Rights and Freedoms*, to assert that Apple and Samsung are acting negligently, are making misleading advertising and representations, are not divulging key information, are manufacturing goods which are not free of latent defects and which are not fit for the purpose for which they are intended and which are dangerous.

[9] More specifically, their arguments follow three lines of attacks (syllogisms #1, #2 and #3):

9.1. Syllogism #1: Samsung and Apple falsely represent that they meet the existing very minimal regulatory standards. Despite being certified, later tests carried out by various third parties on Apple iPhones, show exceedances of the maximum 1.6 W/kg maximum SAR values for head, neck and trunk. Furthermore, Samsung phones are tested at 15 mm. This is in contravention with the

---

2 CQLR, c. P-40.1.
3 CQLR, c. Q-2.

applicable standards and specifications which call for testing at 5 mm. In any event, Apple and Samsung test the phones using a "phony testing regimen" since proximity sensors reduce the power at which phones are being tested. Therefore, any certification is fraudulent.

9.2. Syllogism #2: the regulatory scheme under which ISED certifies cellphones is void and inoperative and cannot be relied on. In any event, Plaintiffs must prove that their phones are safe in real use conditions, regardless of regulatory separation distances, and that they do not exceed the maximum SAR limit of 1.6 W/kg limit. In real life situations, cellphones are placed in pockets, at 2 mm from the body, not at 5 mm or 15 mm. For each mm below the 5 mm separation distance, SAR values increase considerably. Tests carried out by third parties validate this and SAR measurements at a 2 mm separation distance necessarily will far exceed the SAR 1.6 W/kg limit.

9.3. Syllogism #3: Health Canada's findings that there are no non-thermal effects associated to RF exposure are incorrect and dated. Research shows clear links between RF exposure and non-thermal effects. This occurs at SAR levels below 1.6 W/kg. These risks or dangers are hidden from the consumers by the manufacturers.

[10] Plaintiffs seek damages of $13,000 per year until "the radiation pollution is curtailed", unspecified damages to "monitor their health condition", punitive damages and various injunctive relief.

[11] Defendants contest that Plaintiffs meet the requirements of criteria 1), 2) and 4). In summary, they respond as follows:

11.1. The certification of their phones by ISED and the issuance of Technical Acceptance Certificates ("TAC") are determinative of the phones' conformity to applicable regulatory standards.

11.2. All phones have been properly tested. Adherence to regulatory requirements creates a strong presumption that Plaintiffs have not overturned. Reference to a few tests carried out in foreign jurisdictions, under unknown conditions, cannot suffice.

11.3. Health Canada has extensively reviewed literature and concluded that non thermal effects of cell phones do not constitute a risk or danger. As a result, the Canadian regulations do not require not demand any testing or notices. It is not for courts to act as regulators.

11.4. Plaintiffs have not alleged that they suffer from any disease or condition.

[12] As the honourable judge Nicholas Kasirer wrote when he sat on the Quebec Court of Appeal: "lack of rigour at authorization can indeed weigh down the courts with

ill-conceived claims, creating the perverse outcome that the rules on class actions serve to defeat the very values of access to justice they were designed to champion".[4] Plaintiffs Application, as drafted, is in large part ill-conceived and would indeed unduly weigh down on the court. However, a limited and well circumscribed claim merits that authorization be granted.

[13] For the reasons more fully set out herein, at the Application stage, the Court assumes to be true the allegations relating to the following key factual premises, because they are supported by "some evidence":

13.1. Cellphones are held close to the body, namely at a distance of 2 mm.

13.2. Health Canada sets a 1.6 W/kg SAR limit for 1 g of tissue for head, neck and trunk.

13.3. When Apple and cellphones are held at 2 mm from the body, the SAR measurements systematically exceed this level.

13.4. In addition, RF radiation has been evidenced, in certain epidemelogical studies and experiments on rats and mice, to cause non-thermal effects.

[14] On the basis of these factual premises, Plaintiffs meet their burden to demonstrate that it is tenable and not frivolous to advance the following syllogisms:

14.1. The cellphones pose a risk or danger when placed too close to the body or because of RF exposure more generally. A lack of instructions necessary for the protection of cellphone users against a risk or danger of which they would be otherwise unaware constitute a safety defect as per the second paragraph of s. 53, *CPA*. Plaintiffs are therefore entitled to punitive damages by relying on s. 272 *CPA*.

14.2. The cellphones pose a risk or danger when placed too close to the body or because of RF exposure more generally. A lack of instructions necessary for the protection of cellphone users against a risk or danger of which they would be otherwise unaware is a prohibited practice as per s. 228 of the *CPA*. There is a lack of instructions given the risk or danger. Plaintiffs are therefore entitled to punitive damages by relying on s. 272 *CPA*.

[15] All the other remedies sought by Plaintiffs are untenable and frivolous. Indeed, there is no allegation of injury or prejudice suffered by any of the Plaintiffs and they cannot, therefore, meet their burden of demonstration to be authorized to seek payment of compensatory damages. The injunctive relief sought by Plaintiffs is hopelessly and unequivocally unenforceable.

---

[4] *Sibiga* c. *Fido Solutions inc.*, 2016 QCCA 1299, par. 14.

[16] The Authorization will therefore be granted to some representatives who have the necessary legal interest.

[17] Prior to the Court setting out why it has come to these conclusions, the Court will first deal with some procedural matters and will then make 7 general remarks which will serve as the backdrop for the analysis of the criteria of art. 575 CCP.

PROCEDURAL MATTERS

[18] The Application was filed on September 3, 2019. Numerous preliminary motions were presented, including several requests to modify the Application and to file additional evidence. Decisions were rendered.[5]

[19] In early 2022, special management of the file was transferred to the undersigned. A management conference was held to ascertain whether the Application could finally be set down for hearing. There was one outstanding matter relating to an affidavit filed by a mechanical engineer, Mr. Pedro Gregorio. There was a question whether Plaintiffs would seek confidentiality measures prior to filing an affidavit. Ultimately they did not and the parties declared that they were ready for trial for March 31, and April 1, 2022.

1. Additional evidence

[20] Despite the parties' representations during the management conference, Plaintiffs filed a notice of disclosure of exhibits and filed a number of new additional documents. On the eve of the first day of hearing, Plaintiffs' counsel wrote to the Court indicating that he had just received disclosures pursuant to access to information requests relating to certain phones (none of the phones which by the way are manufactured by defendants Apple or Samsung).[6]

[21] In parallel, a few days before the hearing, Samsung noticed that the Extracts of Terms and Conditions which the Court had authorized it to file as additional evidence, were in fact not in use in Canada. Also, in one case, where a manual was filed, Samsung realized that the version filed was in fact a draft version and not the final version.[7] Samsung therefore served a motion on March 29, 2022, supported by an affidavit, explaining how this error had occurred, for leave to file the user manuals which were in use in Canada.

[22] On the morning of the first day of the hearing, the Court allowed the filing of Plaintiffs and Samsung's exhibits with the following provisos:

---

5 See amongst others : Arial c. Apple Canada inc., 2020 QCCS 1932; Arial c. Apple Canada inc., 2021 QCCS 1519.

6 P-14C i) to v).

7 Exhbit S-8. This is quite obvious as the separation distance mentioned is X.X.

> Les parties, de part et d'autre, désirent déposer des pièces additionnelles ou en remplacement des pièces déjà déposées et autorisées par le Tribunal, notamment dans les décisions du 18 juin 2020 et du 14 décembre 2021;
>
> Le Tribunal note qu'il est regrettable que les pièces soient déposées à la dernière minute, mais juge néanmoins, vu l'absence de contestation, qu'il est opportun de permettre leur dépôt, le tout sous réserve de tout argument que les parties voudront faire quant à la force probante ou convaincante de ces pièces;
>
> Le Tribunal réalise que les parties n'ont pas nécessairement eu l'occasion d'étudier les diverses pièces dans un détail aussi minutieux qu'ils auraient pu le souhaiter et, à cette égard, il invite les parties à la fin de l'audience à lui faire les demandes dans l'éventualité qu'il désire se réserver l'occasion de transmettre des commentaires écrits.

[23] After having read and heard the submissions, the Court sees no reason why it should not consider these documents.

2. Re-re amendments of the Application

[24] At the beginning of the March 31, 2022 hearing, Plaintiffs advised the Court that they wished to modify the class definition, so that the period covered by the class would begin in 2007, when the first iPhone was distributed as opposed to 2013. The Court indicated that a verbal modification was not acceptable and that a written motion would be required. Plaintiffs chose not to pursue the matter stating that they would ask modification of the class in due course if and when the Application was authorized and an Introductory Motion was filed.

[25] Plaintiffs' counsel, having announced 70 minutes of representations, then pleaded his case for 4 hours. He referred to a 99 page "plan" of argument and filed an additional 3 page document. He provided 192 authorities.

[26] Throughout his pleadings, Plaintiffs' counsel repeatedly referred to fraudulent behaviour on the part of the manufacturers stating that they had installed "cheating devices" whose purpose was to artificially reduce radiation thereby falsifying the test results. They claimed that "fraud corrupted everything". However, the only vague allegation found in the Application as to so called cheating devices was set out at subpar. 71 (e)[8]:

> THE PHONEY TESTING REGIMEN
>
> (e) In early May of 2020, Mr. Pedro Gregorio discovered the phoney testing regimen "by which defendants and other cellphone manufacturers, distributors and marketers rig the manner of SAR

---

[8] The paragraph numbering and use of the "Phoney Testing Regimen" title is somewhat bewildering as the introductory remark at par. 71 does not relate to this subparagraph.

> testing" such that each phone meets the F.C.C. "limit" but which testing regimen in no manner resembles the manner in which cellphones are actually used: Mr. Gregorio's conclusions are as follows: [nothing follows...]

75. Manufacturers falsely declare in their handset documentation that SAR testing is at maximum transmission power; however, Chicago Tribune testing demonstrates power reduction techniques are used in the handsets. Latest FCC SAR Evaluation Considerations allow such techniques that reduce transmitter power during SAR compliance testing.

> FCC KDB 648474 D04, section 7: "Smart phone manufacturers have implemented different power reduction techniques to maintain compliance. The maximum output power of transmitters operating in data mode is often reduced or can be pulse-modulated with a periodic duty factor to reduce the time-averaged power during simultaneous transmission to maintain voice call quality and SAR compliance. ... power reduction mechanisms can become quite complex and dynamic. ... These types of power and SAR reduction implementations for simultaneous transmission operations have continued to evolve with no clearly established industry standards."
>
> Apple iPhone 7 RF Exposure Information
>
> https://www.apple.com/legal/rfexposure/iphone9,3/en/: "During testing, iPhone radios are set to their highest transmission levels and placed in positions that simulate uses against the head, with no separation, and when worn or carried against the torso of the body, with 5mm separation."
>
> Samsung Galaxy S9 Health & Safety Information, Exhibit S-10, GH68-48856A_Rev_1.1 Page 19, Para 4: "SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands."

[The Court's underlinings]

[27] Nothing in these allegations evidence that testing was carried out at less than maximum power settings.

[28] In response to the Court's probing, counsel referred to an IEEE[9] document which is incorporated by reference by the applicable Canadian statutory instrument. This

---

9 Exhibit P-25C explains who the IEEE is: The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly

provided, according to Plaintiffs' counsel, incontrovertible evidence of a "phoney testing regimen" by which phones would be tested at less than full power.

[29] The Court repeatedly advised Plaintiffs' counsel that there were no allegations to this effect in the Application and that the IEEE document he was referring to was not filed.

[30] The Court also raised the fact that there were no allegations as to the exact manner in which the phones were being operated by the various Plaintiffs, including at what distance the phone was kept or used from the Plaintiffs' head and trunk.

[31] On the morning of the second hearing, Plaintiffs made a verbal motion to file a motion to re-re-amend their Application. It was now explicitly alleged that the phones contained purported cheating devices and that the IEEE document (P-25C) was filed in support to show how this was being hidden. They sought to add the following paragraphs:

> 75.1 Petitioners discovered, for the first time on March 24, 2022. Incontrovertible proof that the Defendants employ defeat/cheating devices in their handsets which reduce power emissions during testing, as indicated by the IEEE as follows:
>
> 75.2 As of October 2020, RSS-102 (Exhibit P-25A) testing provisions of Section 3 for evaluating SAR include, by direct reference and delegation, the testing procedures of IEC/IEEE 62209-152848 (proposed Exhibit P-25C). This updated procedure supersedes and replaces previous 2016 and 2013 procedures.
>
> 75.3 Figure 6 at p. 43, labeled "Test positions for body-worn devices" illustrates a mobile phone under test with front and rear faces against the phantom.
>
> 75.4 This updated procedure includes a completely new section on the topic of "Proximity Sensors" at Section 7.7, pp. 76-81. Subsection 7.7.1 at p. 76 explicitly discloses the method of operation, and the purpose of such sensors:
>
> 7.7.1 General

Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and nongovernmental organizations liaising with the IEC also participate in this preparation.
IEEE Standards documents are developed within IEEE Societies and Standards Coordinating Committees of the IEEE Standards Association (IEEE SA) Standards Board. IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of IEEE and serve without compensation. While IEEE administers the process and establishes rules to promote fairness in the consensus development process, IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards. Use of IEEE Standards documents is wholly voluntary. IEEE documents are made available for use subject to important notices and legal disclaimers (see http://standards.ieee.org/IPR/disclaimers.html for more information).

> Proximity sensors are used to reduce the output power of the [Device Under Test] DUT based on the distance to users and nearby objects. When the device is operating at closer than the triggering distance of the proximity sensor, the maximum output power of a DUT is reduced to ensure SAR compliance. At distances larger than the sensor triggering distance, the proximity sensor is disabled and the maximum output power is restored. Depending on the antenna dimension and its location, a DUT could incorporate one or more proximity sensors to ensure sensor coverage. [Emphasis ours]
>
> 75.5 Subsection 7.7.4 at p. 81 describes SAR measurement involving proximity sensors
>
> Two different maximum output power levels are applied according to the triggering conditions of the proximity sensor. SAR measurements shall be performed for the two different maximum output power state and test distance combinations.
>
> 75.6 A mobile phone equipped with a proximity sensor as described in Subsection 7.7.1 above and tested according to Subsection 7.7.4 would not be "transmitting at its highest certified power level" contrary to representations made in Defendant Samsung's Health and Safety Information disclosure (Exhibit S-10, p. 19, para. 5).

[32] As regards phone use, allegations were added for Plaintiffs at paragraphs 11 to 13.

[33] Although the Court finds it objectionable that such amendments are filed after Plaintiffs assured the Court that the matter was ready for hearing and after a full day of arguments, the Court will nevertheless allow these amendments.

[34] Defendants suffer no prejudice because the Court is of the opinion that as stated, these allegations in no way provide "some evidence" that there is a "phony testing regimen" as the Court will explain in its analysis of Syllogism #1. All these amendments evidence is that the IEEE is fully aware that there are proximity sensors and that it provides clear testing methods in regard thereto.

[35] Had Plaintiffs allegations brought forth some evidence that Apple and Samsung used these mechanisms to "cheat" the testing process when the phones were certified and that the phones, now tested using this P-25C testing method but without "cheating" would exceed the maximum SAR level of 1.6 W/kg, then clearly Samsung and Apple would not have had sufficient time to respond to such allegations and a prejudice would have been suffered. As, however, will be more fully explained below, there is simply no such allegation, these amendments are pure speculation not supported by "some evidence" and hence Apple and Samsung suffer no prejudice by the mere presence of such amendments.

GENERAL REMARKS

[36] Prior to determining whether Plaintiffs have met their burden to demonstrate that the four criteria set out at art. 575 CCP have been met, the Court will make the 7 following "General Remarks". This will provide the factual basis that will be assumed to be true.

1. The claim and the US proceedings in *Cohen*

[37] A similar class action was first instituted against Apple by a group of Plaintiffs (the "Cohen case") in the United States District Court of the Northern District of California.

[38] In 2021, Mr. Justice Pierre-C. Gagnon authorized the filing[10] in the record of the *First Amended and Consolidated Class Action Complaint* filed by Cohen[11]. In reviewing the Cohen complaint, one is struck by the fact that many of the allegations set out in the Application are strikingly similar – if not identical - to those set out in the Cohen complaint.

[39] As a result of this cut and paste drafting strategy, many of the Application's allegations deal with the US regulatory environment, rather than the Canadian regulatory environment.

[40] Justice Gagnon further authorized Apple to file the District Court's Request addressed to the Federal Communications Commission (the "FCC") to appear as an *amicus curiae*[12] "to better inform the Court on the proper application of its regulation and guidance" and also authorized the filing of the FCC's ensuing statement of interest. Justice Gagnon also allowed the filing of the District Court's judgment which dismissed the Cohen Complaint on the basis of the American constitutional principle of pre-emption[13] by which the FCC's radio frequency radiation exposure regulations pre-empted plaintiffs' tort and consumer-fraud claims.[14]

[41] After the Court had taken the Application under advisement, Apple most appropriately informed the Court that the United States Court of Appeals for the Ninth District had affirmed the district court's summary judgment based on pre-emption of the state-law claims by federal law.

2. The cell phones used, leased or owned by plaintiffs

[42] The Plaintiffs all claim to lease or own some of the smartphones listed in the class. The degree of imprecision and the internal inconsistencies in the allegations explaining their legal title are troubling:

---

10 *Arial* c. *Apple Canada inc.*, 2020 QCCS 1932.
11 Exhibit APL-10.
12 APL-11.
13 APL-12.
14 Exhibit APL-12.

42.1. Tracey Arial: she first owned a Galaxy S5 (date or context of purchase or lease unknown). Since April 2018, she uses a Galaxy S 8 which, in the same paragraph, she claims to have purchased and to be leasing from Videotron.[15] The document she files appears to be a contract of purchase for 2 S8 phones.

42.2. Claire O'Brien: She claims she leased a Samsung A-20 which is not included in the list of phones of the proposed class, but then claims to have a "contract with Videotron for the lease of her Galaxy S-8 as appears from exhibit P-20". Exhibit P-20 is a statement summarizing billing and payments for a Virgin Mobile Account. She fails to demonstrate a fundamental and essential question: which phone does she own? On this sole point, the Court cannot and will not consider her as a potential representative.

42.3. Erika Patton: she alleges that she has owned an iPhone 6s for two years starting in 2016 and an iPhone 6S plus for 1 year in 2018. She then "inherited" Alex Tasciyan Samsung Galaxy S8 plus in August 2019. She files an agreement with KOODO for a iPhone 6 32 GB phone, which is neither a 6S or 6S plus phone, effective as of July 12, 2017, whereby she purchased a phone, subject to a $435 cancellation fee which progressively reduces to $0 over 24 months.

42.4. Zoe Patton: she claims to have owned an iPhone 5C in 2017 and then an iPhone 6S plus for 2 years until she acquired her iPhone 8 plus. She files as an exhibit which purports to be a contract with Rogers Communications for the lease of her iPhone 8 plus, but is in fact merely a bill indicating an unpaid balance of $960.22.[16]

42.5. Alex Tasciyan: he owned Erika Patton's Samsung Galaxy S8 from 2016 to August 2019 and from then on, a Samsung Galaxy S10 plus. He purports to file a contract, however, the exhibit is in fact an extract of a monthly bill dated July 2020.

42.6. Matthew Nucciarone: He "owns" a Samsung Galaxy S7 since 2016. No document is filed.

42.7. Vito DeCicco: he claims that he bought an iPhone 7 about 5 years ago, but then states that he leases the phone from Videotron. He provides no contract.

---

15 Exhibit P-19.
16 Exhibit P-23.

3. Non-ionizing electromagnetic frequency, thermal effects and specific absorption rates ("SAR")

[43] From the exhibits filed – in large part from Safety Code 6 which will be discussed more extensively in the following section [17]-, and for the purposes of the Application, the Court holds the following facts to be true:

43.1. Electromagnetic radiation is spread across a large spectrum of frequencies.

43.2. At the high end of the spectrum, e.g. extreme ultraviolet, x-rays or gamma rays, ionizing radiation will occur. This means that a result of the radiation, electrons may be freed from their atoms (ions). Hence, the chemical bonds of matter may be modified. It is no controversial that this is deleterious to human health.

43.3. At the lower end of the spectrum, it is considered non-ionizing radiation.

43.4. When cellphones are emitting and receiving, they are doing so at a frequency which is called radiofrequency ("RF"). Radiofrequency fields fall within the range of 3kHz to 300 GHz.

43.5. There is a clear scientific consensus that RF radiation emitted or received by cellphones can be absorbed by the human body tissue. This will result in heating of body tissue or stimulation excitable tissue, i.e. nerves. This phenomenon is called thermal effects. The body can thermoregulate heat, but only to a certain extent.

43.6. Absorption of RF energy is commonly described in terms of a Specific Absorption Rate (SAR), which is a measure of the rate of energy deposition per unit mass of body tissue and is usually expressed in units of watts per kilogram (W/kg).

43.7. Studies have consistently demonstrated a threshold effect for the occurrence of behavioural changes and alterations in core body temperature of ~1.0°C, at a whole-body average SAR of ~4 W/kg. To ensure that thermal effects are avoided, Safety Code 6 has incorporated safety factors resulting in whole-body averaged SAR limits of 0.4W/kg over the whole body mass.

43.8. Peak spatially-averaged SAR limits aim to avoid thermal effects in localized human tissues. These limits reflect the highly heterogeneous nature of typical RF field exposures and differing thermoregulatory properties of various body tissues. These limits pertain to discrete tissue volumes (1 or 10 g, in the shape of a cube) where thermoregulation can efficiently dissipate heat and avoid changes in body temperature that are greater than 1°C.

---

[17] Exhibit P-26

43.9. Health Canada sets two limits for Peak spatially-averaged SAR: one for the head, neck and trunk, and one for the limbs. In an uncontrolled environment[18], for the head neck and trunk, the maximum SAR value averaged over any 1g of tissue is 1.6 W/kg. For limbs, it is 4 W/kg over any 10 g of tissue.

43.10. To measure SAR, a phantom is used which simulates the body tissues reaction to RF radiation exposure. A phone is placed at a certain separation distance from the trunk and the head of the phantom.

43.11. The closer the phone is placed to the human body, the likelier it will generate thermal effects. Millimeters matter.

4. The Canadian regulatory context

[44] In Canada, prior to the manufacture, import, distribution, lease, offer for sale or sale of any cell phone, a cellphone model must be certified. This certification process aims to ensure that the phones meet the applicable standards, which includes maximum SAR limits.

[45] This General Remark #4 summarizes the legislation enacted by Parliament, the regulations adopted by the Governor in Council and other statutory instruments issued by the Minister of Innovation, Science and Economic Development ("ISED"). Plaintiffs have filed some of the applicable texts as exhibits. The Court must in any event take judicial notice of the applicable laws, regulations and statutory instruments, in virtue of art. 2807 CCQ and the *Statutory Instruments Act.*[19]

[46] In the present instance, the determination of the regulatory requirements and applicable standards is not a question of fact or a mixed question of fact and law; it is a question of pure law.

[47] These are the Court's findings.

[48] The federal Parliament has exclusive jurisdiction over radiocommunications.[20] It has therefore enacted the *Radiocommunication Act.*[21] This Act governs radio apparatuses which include cell phones.[22]

---

18 P-26, p. 13-14: In Safety Code 6, an "uncontrolled environment" is defined as: an area where any of the criteria defining the controlled environment are not met. A "controlled environment" An area where the RF field intensities have been adequately characterized by means of measurement or calculation and exposure is incurred by persons who are: aware of the potential for RF field exposure, cognizant of the intensity of the RF fields in their environment, aware of the potential health risks associated with RF field exposure and able to control their risk using mitigation strategies.

19 R.S.C., 1985, c. S-22.

20 *Rogers Communications Inc.* v. *Châteauguay (City)*, 2016 SCC 23, [2016] 1 SCR 467, par. 41.

21 R.S.C., 1985, c, R-2.

22 *Ibid.*, s.2, definitions of "radio apparatus" and "radio sensitive equipment".

[49] Paragraph 6(1)(a) states that the Governor in Council may make regulations respecting technical requirements and technical standards in relation to radio apparatuses and therefore cellphones.[23] Pursuant to this regulatory power, the Governor in Council has adopted the *Radiocommunication Regulations*.[24]

[50] The *Radiocommunication Act* also explicitly empowers the Minister of Industry (now ISED) to issue technical acceptance certificates ("TACs") in respect of radio apparatus and to set the terms and conditions of such TACs[25]. The Minister may also establish technical requirements and technical standards in relation to such radio apparatuses. [26]Any power, duty or function of the Minister under this Act or the regulations may be exercised or performed by any person authorized by the Minister to do so and, if so exercised or performed, shall be deemed to have been exercised or performed by the Minister.

[51] Paragraphs 4(2) and (3) of the *Radiocommunication Act* read as follows:

> (2) No person shall manufacture, import, distribute, lease, offer for sale or sell any radio apparatus, interference-causing equipment or radio-sensitive equipment for which a technical acceptance certificate is required under this Act, otherwise than in accordance with such a certificate.
>
> (3) No person shall manufacture, import, distribute, lease, offer for sale or sell any radio apparatus, interference-causing equipment or radio-sensitive equipment for which technical standards have been established under paragraph 6(1)(a), unless the apparatus or equipment complies with those standards.

[52] The *Radiocommunications Regulations* adopted by the Governor in Council provides more specifically that Category I equipment require a TAC[27]. Cellphones are Category I equipment.[28] Hence, manufacturers must hold a TAC for each model.

[53] In order for a TAC to be issued, the cell phone manufacturer must demonstrate to the Minister that its model complies with all "applicable standards".[29] A TAC will be issued only where the Minister determines that the model complies with all applicable standards.[30]

[54] The applicable standards issued by the Minister are regrouped under the heading "Radio Standards Specifications" ("RSS"). When they are issued, a notice is concurrently

---

23 *Ibid.*, s. 6.
24 SOR/96-484.
25 *Id.*, subpar. 5(1) (a) (iv).
26 The power of the Minister to so act is also confirmed in the *Radiocommunication Regulations* which explicitly empowers the Minister to establish the applicable standards for equipment or any class of equipment.
27 *Ibid.*, s. 21(1).
28 *Ibid.*, s. 2.1.
29 *Ibid.*, s. 21(3).
30 *Ibid.*, ss. 21 and 21(4).

published in the Canada Gazette, Part I that states that the standards are accessible on ISED's website. The RSSs are structured as follows: there is a general RSS[31] (*"RSS-Gen"*) which sets out general and certification requirements for licensed and licence-exempt radio apparatus. At the date of the Application, Issue 5 is in force since April 2018. Along with this *RSS-Gen*, ISED also issues a number of discrete RSS specifications which add to, or modify, *RSS-Gen*. Amongst the more specific RSS regulations, one finds *RSS-102*.[32] The 5th Issue of *RSS-102* is in force since 2015,[33] the 4th issue dating back to 2010.[34] These two versions are filed by Plaintiffs as exhibits.[35]

[55] It is in this *RSS-102* that the standards and specifications for cellphones are found. Section 3.1.1 contains the provisions which shall apply to the SAR Measurement of Body-Worn Devices. It mandates the distance at which the testing must occur. The Court will discuss the debate between the parties as to the proper interpretation of this section in its discussion of criteria 575(2) CCP. Section 4 sets out the RF exposure limits stating that "Industry Canada has adopted the SAR and RF field strength limits established in Health Canada's exposure guideline, Safety Code 6".

[56] A few remarks are therefore warranted on Safety Code 6. Safety Code 6 is prepared by the Consumer and Clinical Radiation Protection Bureau of Health Canada. It set outs the requirements for the "safe use of, or exposure to, radiation emitting devices and to set safety limits for human exposure to RF fields and applies to all persons working at, or visiting federally regulated sites. In 2015, a new Safety Code was published by Health Canada, updating the 2009 version[36]. Safety Code 6 explains that "it has been adopted as the scientific basis for equipment certification and RF exposure compliance specifications" outlined in *RSS-Gen* and *RSS-102*.[37]

[57] As already set out in the overview above, Safety Code 6 concerns itself with the thermal effects of RF radiation exposure, which it defines as the "biological effects resulting from heating of the whole body or of a localized region due to exposure to RF fields, where a sufficient temperature increase has occurred that results in a physiologically significant effect".[38]

[58] As also already mentioned, distinct SAR maximums limits are provided for the whole body, the limbs, and the head, neck and trunk.

---

31 *Radio Standards Specification RSS-Gen, issue 5, General Requirements for Compliance of Radio Apparatus.* Released as per Notice No. SMSE-006-18, Canada Gazette Pt I, vol. 152, no. 18 (2018).
32 *Radio Standards Specification RSS-102, Issue 5, Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)*. Released as per Notice No. SMSE-005-15, Canada Gazette Pt I, Vol. 149, no. 13 (2015).
33 Exhibit P-25A.
34 Exhibit P-25B.
35 Exhibit P-25A and P-25B.
36 Exhibit P-26.
37 *Ibid.*, p. 1 and 15.
38 *Ibid.*, p. 14.

[59] Once all the conditions of *RSS-102* are met, the phone is certified and the manufacturer then holds the TAC.

[60] In addition, the *Radiocommunication Regulations* provide that the Minister, at any time during the life cycle of the equipment, may test or, with the agreement of the manufacturer or importer, have the manufacturer or importer test the equipment in order to ensure compliance with applicable standards.[39] S. 2.07 of *RSS-102* also states that Industry Canada (now ISED) will conduct market surveillance compliance audits and compliance investigations from time to time, after certification, of radiocommunication apparatus intended for sale in Canada.[40]

5. SAR measurements

[61] SAR levels were tested for Apple and Samsung phones in the three following contexts.

5.1 In testing up to certification and issuance of the TACs

[62] Apple and Samsung filed the TACs that were issued for all phones which are the subject of this class action.[41] All the values declared are below the 1.6W/g for 1 gr. of tissue limit set out in *RSS-102*.

[63] This cannot be disputed by Plaintiffs.

5.2 Some Apple and Samsung phones were tested by ISED after the TACs were issued and compliance to standards was confirmed

[64] As mentioned above, ISED can carry out audits or compliance investigations. Plaintiffs filed a table prepared by the Department of Innovation, Science and Development Canada ("ISED") which sets out all the audits and compliance investigations which it carried out. A table was generated by ISED in response to a request for information by a third party. This request was worded as follows:[42]

> I am requesting detailed audit information for the last 5 years with results on cell phones tested to determine if the radiofrequency radiation emitted is within Safety Code 6 limits. I would like the following: - Was the phone provided directly by the manufacturer or was it "off the shelf"; - Manufacturer and model of the phone tested: - Emission levels found: - If the SAR exceeded 1.6W/kg, what actions, if any, were taken."
>
> [Court's underlinings]

---

39 *Radiocommunication Regulations*, s. 24(2).
40 Exhibit P-25A.
41 S-11 à S-14 et APL-5.
42 Exhibit P-14 C) ii.

[65] The table prepared in response to this request evidences that ISED tested an iPhone 7, an iPhone 11[43] and 6 Samsung phones.[44] The Apple phones were provided by the manufacturer, while most, but not all, the Samsung phones were off the shelf.

[66] All the phones so tested showed SAR levels well below the maximum SAR 1.6 W/kg limit when tested at the same separation distance as the manufacturer.

5.3 Tests done outside the TAC certification or ISED audit or compliance processes

[67] Plaintiffs have provided the outcome of two types of tests which were done on some phone models:

67.1. Retesting at the same distance as the manufacturer: when tested at the distance set out in their certificates, these independent tests evidence that certain iPhones exceed the SAR exposure limit of 1.6W/kg for 1 g of tissue. There are no such exceedances for Samsung phones which are tested at a separation distance of 15 mm.

67.2. Retesting at real life separation distance, i.e., 2 mm: Plaintiffs affirm that cell users do not carry cell phones at 5 or 15 mm from the trunk, but rather much closer to the body. Hence, the appropriate separation distance with the phantom at which tests should occur is 2 mm. When tested at 2 mm separation distance, the SAR levels of Samsung phones and iPhones significantly exceed the maximum 1.6 W/kg value SAR value for 1 g of tissue.

[68] They also refer to measurements carried out by RF Exposure Lab hired to carry out tests by CBC's Marketplace in 2017, by the Chicago Tribune in 2019 and by a phone case manufacturer, Penumbra Brands, in 2020.

68.1. **CBC Marketplace**: In 2017, CBC's Marketplace reported the results of tests carried out by RF Exposure Lab on a Samsung S7 and an iPhone 7 placed at 2 mm from the phantom. The SAR measurements exceeded the 1.6 W/kg limit. [45]

68.2. **Chicago Tribune**: A similar exercise was carried out by the Chicago Tribune in an article published in August 2019 (the "CT Article").[46] The journalists once again asked the accredited lab, RF Exposure Lab, to carry out tests on 11 phone models. They first tested the devices at the distance at which

---

43 Exhibit P-14 C) iii): the two Apple phones were an iPhone 7 (A1778) and an iPhone 11 (A2111).

44 Exhibit P-14 C (iii) : The six Samsung phones were SM-6390W, SM-J327W, SM-A530W, SM-A505W, SM6960W, SM-6950W.

45 Exhibit P-3B.

46 Exhibit P-3A: Sam Roe, *We tested popular cellphones for radiofrequency radiation. Now the FCC is investigating*, The Chicago Tribune, August 21, 2019.

the manufacturers claim to test the phones (Apple at 5 mm, Samsung at 15 mm). They then tested the devices at 2 mm away from the simulated body. The results for the phones which concern this class action are as follows:

Phone Model	Distance			
	At 15 mm	At 10 mm	At 5 mm	At 2 mm
Apple phones				
7	N/A	N/A	3.22	4.67
X	N/A	N/A	2.19	8.01
8	N/A	N/A	1.10	1.79
8Plus	N/A	1.10	0.68	2.64
Samsung Phones				
S8	N/A	1.53	N/A	8.22
S9	0.63	N/A	N/A	3.8

68.3. **The Penumbra test** : tests were carried out on an iPhone 11 Pro phone by RF Exposure Lab on behalf of a phone case manufacturer, Penumbra Brands, for the purpose of demonstrating how the case could reduce RF exposure. Measurements were carried out with and without a case.[47] With a 5 mm separation gap and without a case, the SAR measured was 3.83W/kg per 1g of tissue, well above the 1.6 W/kg limit.[48]

[69] Finally, they file a table[49] which comprises tests results carried out for submission to the French authorities for a slew of cellphone models, including a number of Apple and Samsung models.[50]

[70] These tests require some context to be cast in their proper light.

[71] The French SAR measurements cannot be directly correlated to those measured in the North American context as the SAR unit for purposes of measurement is different.

---

47 Exhibit P-3HA.
48 Exhibit P-3HB.
49 Exhibit P-3C.
50 This table appears to be prepared by the Agence nationale des fréquences (ANFR) and lists all the test results carried out in by various phone manufacturers from 2012 to 2019.

In a report filed by Plaintiffs, the scientist Om Ghandi explains that [51] "The ICNIRP guideline [used by the French] is more lax and prescribes that the microwave radiation for such wireless devices not create an SAR in any part of the body of more than 2.0 W/kg for any 10 g of tissue". Ohm further relates that "the ICNIRP standard will permit radiated powers of cell phones to be 2.5 to 3 times higher than those allowed by the IEEE/FCC standard". Under this reserve, all the Apple and Samsung phones listed are considered to be "conforme", as appears from the column *conformite_aux_normes,* which allowed for the phones at separation distance anywhere from 0 to 25 mm. Hence, the French testing would be of no use and could not be seen as "some evidence" filed to meet the burden of demonstration that the phones do not meet the SAR level.

[72] That being said, the table is nevertheless of relevance and interest. It evidences that from September 2012 to 2017, aside from testing at their chosen separation distance, manufacturers also tested their phones at 5 mm separation distance (*das_tronc_a_5mm*) and at 0 mm separation distance (*das_tronc_au_contact*) and these test results are also set out on the table. In particular, when one examines Samsung data, one notices a very clear pattern: the SAR values increases several fold as separation distances diminish from 15 mm, to 5mm to 0 mm separation.[52] The same pattern is exhibited for Apple, from a 5 mm separation to a 0 mm separation.[53]

6. Other deleterious effects other than thermal effects

[73] In its introductory paragraphs, Plaintiffs state their case regarding biological effects which go beyond mere thermal tissue heating as follows:

> Numerous recent scientific publications, supported by hundreds of scientists worldwide, have shown that RF radiation exposure affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Thus, Defendants' design, manufacture, and sale of smartphones that far exceed applicable guidelines exacerbate the health risks to Plaintiffs and the Classes.

[74] These non-thermal adverse effects of RF exposure have attracted and continue to attract a great deal of scientific attention and much research work is carried out continuously to properly assess them.

---

[51] Exhibit P-29, p.

[52] Exhibit P-3C : lines 81, 89, 99, 105 to 107, 112, 151, 157, 169, 172, 178 to 181, 193, 194, 202, 203, 240, 53, 255, 267-270, 276, 303, 347-348, 374 and 376.

[53] Exhibit P-3C : lines 223, 233, 234 and 339.

[75] The starting point is 2011 and the work of the World Health Organization ("WHO") International Agency for Research on Cancer ("IARC").[54] In a press release filed by Plaintiffs, the IARC explained that there was "mounting concern about the possibility of adverse health effects resulting from exposure to radiofrequency electromagnetic fields, such as those emitted by wireless communication devices". Hence, a working group of 31 scientists from 14 countries (the "IARC Monograph Working Group") met to "assess the potential carcinogenic hazards from exposure to radiofrequency electromagnetic fields"[55] . The IARC Monograph Working Group "considered hundreds of scientific articles" and concluded as follows:[56]

> **Results**
>
> The evidence was reviewed critically, and overall evaluated as being limited among users of wireless telephones for glioma and acoustic neuroma, and inadequate to draw conclusions for other types of cancers. The evidence from the occupational and environmental exposures mentioned above was similarly judged inadequate. The Working Group did not quantitate the risk; however, one study of past cell phone use (up to the year 2004), showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period).
>
> **Conclusions**
>
> Dr Jonathan Samet (University of Southern California, USA), overall Chairman of the Working Group, indicated that "the evidence, while still accumulating, is strong enough to support a conclusion and the 2B classification. The conclusion means that there could be some risk, and therefore we need to keep a close watch for a link between cell phones and cancer risk."
>
> "Given the potential consequences for public health of this classification and findings," said IARC Director Christopher Wild, "it is important that additional research be conducted into the long-term, heavy use of mobile phones. Pending the availability of such information, it is important to take pragmatic measures to reduce exposure such as hands-free devices or texting. "
>
> [The Court's underlinings]

[76] The press release further specified that a 2B classification means that the RF exposure is possibly carcinogenic to humans which the IARC defines as follows:

---

54 The IARC's mission of which is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships.

55 Exhibit P-15.

56 *Ibid.*, p. 2.

> This category is used for agents for which there is limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals. It may also be used when there is inadequate evidence of carcinogenicity in humans but there is sufficient evidence of carcinogenicity in experimental animals. In some instances, an agent for which there is inadequate evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals together with supporting evidence from mechanistic and other relevant data may be placed in this group. An agent may be classified in this category solely on the basis of strong evidence from mechanistic and other relevant data.
>
> [The Court's underlinings]

[77] Leading up to its 2015 issue, the authors of Safety Code 6 examined non-thermal effects which it describes as follows: "Biological effects resulting from exposure to RF fields that are not due to tissue heating". They reviewed 61 scientific documents among which the IARC's monograph referred to in the above mentioned press release.[57]

[78] The Safety Code 6 authors decided not to impose any basic restrictions or specifications to limit non-thermal effects. Health Canada concluded that there was no scientific evidence that RF exposure causes non-thermal effects below the basic restrictions or levels. They state that "despite the advent of numerous additional research studies on RF fields and health, the only established adverse health effects [...] relate to the occurrence of tissue heating and nerve stimulation (NS) from short-term (acute) exposure". According to the authors, "the hypotheses of other proposed adverse health effects occurring at levels below the exposure limits outlined in Safety Code 6 suffer from a lack of evidence of causality, biological plausibility and reproducibility and do not provide a credible foundation for making science-based recommendations for limiting human exposures to low-intensity RF fields". [58]

[79] Much water has flown under the bridge since the 2015 issuance of Safety Code 6.

[80] Plaintiffs have filed several studies which see EMF radiation as deleterious to health. Briefly summarized, their findings are:

80.1. International Appeal of scientists for protection from non-ionizing EMF exposure:[59] in calling on the WHO to "exert strong leadership in fostering the development of more protective EMF guidelines, encouraging precautionary measures, and educating the public about health risks, particularly to children and fetal development", this large group of scientists stress that recent scientific publications have shown that EMF can increase "cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological

---

57 It is document 17 of the list of references in exhibit P-26.
58 Exhibit P-26, p. 2.
59 Exhibit P-13A;

disorders and negative impacts on general well-being in humans".

80.2. Expertise report of Christopher J. Portier:[60] this expertise was filed in early 2021 in the course of an ongoing litigation. Dr. Portier "evaluates the body of existing scientific literature to determine whether RF exposure can cause specific brain tumors in humans" and concluded from epidemiological studies that "an association has been established between the use of cellular telephones and the risk of gliomas and acoustic neuromas and chance, bias and confounding are unlikely to have driven this finding". He also carried out an extensive review of laboratory cancer studies on rats and mice and further concluded that "there is sufficient evidence [...] to conclude that RF can cause tumors in experimental animals with strong findings for gliomas, heart Schwannomas and adrenal pheochromocytomas in male rats and harderian gland tumors in male mice and uterine polyps in female mice. There is also some evidence supporting liver tumors and lung tumors in male and possibly female mice".

80.3. Lennart Hardell and Michael Carlberg's review of literature: In their article published in 2018 in the International Journal of Oncology[61], they complain of the lack of objectivity of the WHO. They use data from a very recent US National Toxicology Program (NTP) which evidences, in rats and mice, an increased incidence of glioma of the brain and malignant schwannoma in the heart. They believe that this NTP study confirms that it is no longer merely possible that cell-phone is a human carcinogen. They believe there is "clear evidence" of RF radiation carcinogenicity based on human epidemiology and supported by animal results in the NTP reports and in particular of Glioma, vestibular schwannoma (acoustic neuroma), malignant lymphoma and multi-site carcinogen. There is also "some evidence" of thyroid cancer.

[81] Plaintiffs also file an affidavit of an environmental toxicologist, Dr. Magda Havas.[62] She has been an associate professor at Trent University including at the Trent School of Environment in Peterborough, Ontario. She studies the biological effects of non-ionizing electromagnetic frequencies generated by anthropogenic sources. She has 197 publications to her name, 97 of which are peer reviewed. She has provided expert testimony in 28 cases. She has presented more than 370 lectures or workshops. She opines that "the assumption that microwave radiation is harmful only if it heats the body is no longer scientifically valid".[63] Referring to 22 studies on corresponding SARs, she

---

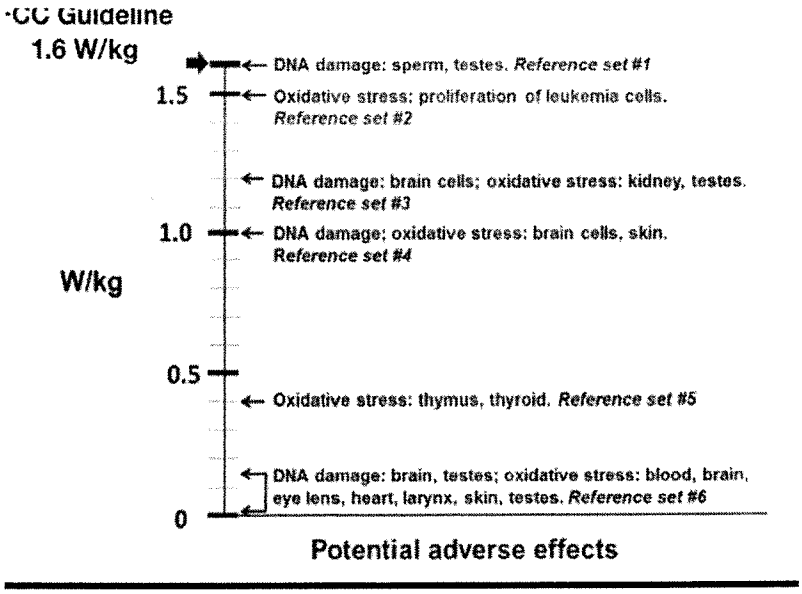
60 Exhibit P-14B,p. 51.

61 Exhibit P-0B which is the following scientific article: Lennart Hardell and Michael Carlberg, *Comments on the US National Toxicology Program technical reports on toxicology and carcinogenesis study in rats exposed to whole-body radiofrequency radiation at 900 MHz and in mice exposed to whole-body radiofrequency radiation at 1,900 MHz*, (2018) 54 International Journal of Oncology, p. 111-127.

62 Exhibit P-3F.

63 Exhibit P-3F, par. 27.

provides the following graph as to the potential adverse effects may occur at levels below 1,6 W/kg:



[82] Finally, Plaintiffs also cite the case of an Italian Plaintiff who successfully sued an insurance company which refused to recognize that his neuroma of the right ear was an occupational illness contracted from the "abnormal use of cell phones in the period of 1995 to 2010 on which he had worked at the Telecomp Italia s.p.a. facilities".[64] The Court drew its finding on the following circumstantial evidence: plaintiff used the phone at least two and a half hours a day up to a maximum of seven hours, for a total of 12,600 hours and he was right handed and the tumour developed on the right part of his head. The Court of first instance referred to the IARC assessment that exposure to EF is a "possible carcinogen" for humans.

7. The Gregorio expertise

[83] The preceding six General Remarks are drawn from the exhibits filed, which the Court assumes to be true.

[84] All this information is summarized and presented in two affidavits by Pedro Gregorio, a mechanical engineer.[65]

---

64 Exhibit P-31 ii).

65 An affidavit dated February 15, 2021, (exhibit P-0A) and another dated December 2019 (exhibit P-3G).

[85] It is not contested that Gregorio is the husband of Tracey Arial. This raises very serious concerns as to a conflict of interest. Furthermore, although he has an impressive curriculum vitae in his field of work, namely mechanical engineering, he has no demonstrable expertise in toxicology, microbiology or epidemiology. He cannot offer a legal interpretation of the scope of the Canadian radiocommunications regulatory environment.

[86] At the application stage, any report filed is not to be considered with the same degree of scrutiny as it would if it was filed as an expert report on the merits. Professor Lara Khoury and Rebecca Schurr, while extensively reviewing the common law and civil law case law of causation in health products class certification, comment on the type of scientific evidence considered sufficient at the authorization level. The Court agrees with their summary of the state of the case law on such matters[66]:

> Thus, limited scientific evidence appears sufficient to support allegations at certification/authorization. Causal theories and associations are enough, and so is "biological plausibility" of the causal allegations. Limited scientific studies are also admitted, even when the evidence they lead to is "tenuous" or "limited", or when they are contradicted, or, surprisingly, where their seriousness can be doubted. Evidence based on suspicion and hypotheses is insufficient according to one decision, however.
>
> [Courts underlinings]

[87] It is therefore not opportune to deal with the expert report in the same manner as when the Court is deciding on a motion for dismissal under art. 241 CPC raising grounds of irregularity, substantial error or bias.

[88] Nevertheless, in very exceptional circumstances, courts may have to set aside an expert report when considering it would bring the administration of justice in disrepute. If the expert is in a patent conflict of interest or expresses opinions for which he has evidently and indisputably no expertise, the Court cannot hold this expertise to constitute "some evidence" for Plaintiffs to meet their burden of demonstration. As per art. 22 CCP, the Court must at all times be convinced that the expert is carrying out his or her mission objectively and impartially, in a manner which overrides the parties' interest.

[89] In the present case, the Court is of the view that allowing the Plaintiffs to meet their burden of demonstration by resting on Gregorio's expertise would indeed put the administration of justice in disrepute.

[90] However, accepting or refusing to consider the Gregorio expertise has no practical impact on the present matter. Gregorio's declarations on key points to Plaintiffs' case are most often summaries of primary sources already filed as exhibits. The Court will rely on

---

66 Lara Khoury et Rebecca Schurr, "Causation in Health Products Class Action", in Concilier la sécurité des produits et la responsabilité civile à l'ère du risque et de l'incertitude : actes d'un colloque au Lac Sacacomie, Lara Khoury et Marie-Ève Arbour ed., 2019, Éd. Yvon Blais, Cowansville, p. 186.

these primary sources, and Gregorio's summary thereof would, in any event, have been duplicative.[67]

ANALYSIS

[91] These general remarks having been made, the Court can now analyze the four criteria of art. 575 CCP.

1. Do the facts alleged appear to justify the conclusions sought (art. 575(2) CCP)

[92] Plaintiffs seek the following conclusions:

> **DECLARE** Defendants have contravened sections 2, 8, 37, 53, 216, 223,1, 218, 219, 228, 238(a), 253 and 272 of the *Consumer Protection Act*;
>
> **DECLARE** Defendants have contravened article 1457 C.C.Q.;
>
> **DECLARE** Defendants have contravened sections 19.1 to 22 of the Loi sur la qualité de l'environnement;
>
> **DECLARE** Defendants have contravened sections 1, 6, 7, 24, 39, 46.1 et 49 de la Charte des droits et libertés de la personne;
>
> **CONDEMN** Defendants to solidarily pay to group members the sum of thirteen thousand dollars per year (13 000 $), per member, for the past three (3) years and for each additional year until such time as the radiation pollution is curtailed, with interest at the legal rate as well as the special indemnity provide for at article 1619 du C.C.Q. calculated from the date of Notice;
>
> **CONDEMN** Defendants to pay to group members the cost of medical monitoring;
>
> **ORDER** Defendants to publicize Non-Ionizing Radiation Protection EMF hazard warning signs for wireless users of Affected mobile phones and determine the content and location of those warnings;
>
> **DECLARE** Defendants committed a fault in failing to take all necessary measures to disclose, cease or considerably diminish the radiation pollution suffered by class members;
>
> **DECLARE** Defendants committed fraud by employing the Phoney SAR Testing Regimen to intentionally mislead consumers as concerns SAR exposure from Defendant phones;

---

[67] *Moreau* c. *Moreau (Succession de Moreau),* 2020 QCCS 2369, par. 50 et 51; voir aussi la permission d'appeler refusée dans *Moreau* c. *Moreau* (Succession de Moreau), 2020 QCCA 1538, par. 10

> **ORDER** Defendants lower the level of radiation pollution (SAR) to an acceptable level, in the manners set out at para. 116, at their sole expense and within six (6) months;

[93] The Court for reasons it will elaborate later on, also considers that a conclusion is sought for punitive damages but that it was inadvertently omitted from these conclusions.

[94] Plaintiffs provide a 99 page document which is inappropriately entitled "Plan of Argument". It is anything but a plan. It has no logical organization. 246 paragraphs are placed under 37 unnumbered titles. There are many internal contradictions. Plaintiffs regrettably often resort to hyperbole and sarcasm. The work product is very difficult to follow in many respects. The Court will follow the sequence indicated below which provides some semblance of order to this otherwise haphazard assembly of factual and legal premises and conclusions.

[95] Prior to proceeding to present its understanding of Plaintiffs arguments and to their analysis, the Court will review the legal principles which must be applied when determining whether the facts appear to justify the conclusions sought (575(2) CCP).

1.1 Legal principles

[96] It is the appearance of right of Plaintiffs' individual claims which must be analyzed. The fact that another member could be successful is not relevant at this stage.[68]

[97] In the present case, there are seven Plaintiffs. They have different phones. They do not operate them in the same manner. The analysis of the 575(2) CCP criteria must be carried for each. If none can meet the necessary threshold to meet this criteria, then the Application cannot be granted. If some, but not all, meet the criteria, it is only they who will be authorized to act as representatives, and not the others. Whether these representatives can also institute a recourse for phones which they have not used or owned is a question which will be decided when analyzing the criteria of subsection 575(1) CCP.

[98] The applicant's burden in relation to par. 575(2) CPC is to present an "arguable case" in light of the facts and the applicable law. This threshold is one of "demonstration": the applicant must demonstrate that the proposed "legal syllogism" is "tenable". This is a low threshold. The applicant must establish "a mere "possibility" of succeeding on the merits", "*not even* a "realistic" or "reasonable" possibility".[69]

[99] It goes without saying that a legal syllogism contains factual and legal premises and a conclusion.

---

[68] *L'Oratoire Saint-Joseph du Mont-Royal* v. *J.J.*, 2019 SCC 35, [2019] 2 S.C.R. 831, par. 82 [« ***Oratoire*** »] citing, amongst others, *Sofio* c. *Organisme canadien de réglementation du commerce des valeurs mobilières (OCRCVM)*, 2015 QCCA 1820, par. 10.

[69] *Oratoire*, par. 58.

[100] Insofar as the factual premises are concerned, the evidentiary threshold for establishing an arguable case falls "comfortably below" the burden of balance of probabilities. The applicant "must present facts that are specific enough to allow the legal syllogism to be considered". The Court must "pay particular attention not only to the alleged facts but also to any inferences or presumptions of fact or law that may stem from them and can serve to establish the existence of an arguable case".[70] That being said, "Bare allegations" are insufficient to meet this threshold. They must "be supplemented by "some evidence" that — "limited though it may be" — must accompany the application in order "to form an arguable case"".[71]

[101] In *Ehouzou*, the Court of Appeal directs authorizing judges to consider allegations on their face, "unless they are contradicted by other facts, are otherwise deemed untruthful or are too vague". Authorizing judges cannot "consider allegations that are mere speculation or reflect an opinion". [72] Hence, for example stating as a bare allegation that there is a conspiracy will not suffice, absent other facts, to meet the burden of demonstration.[73]

[102] In *Asselin*, the Supreme Court further explains that "applicant[s] must present facts that are specific enough to allow the legal syllogism to be considered but that it is not necessary to provide step-by-step details of the legal argument to be made in the submissions on the merits of the case". Hence, the Applicant need not lay out the entire legal argument "in minute detail ".[74]

[103] Justice Bisson in *Homsy* offers this most insightful summary of the state of the law on evidentiary burden of demonstration at the authorization stage:[75]

> - Une allégation générale visant le comportement d'une partie défenderesse ne peut être tenue pour avérée sans la présentation par le demandeur d'un élément de preuve. Tout fait ne doit cependant pas être supporté par un élément de preuve, car le Tribunal[17] peut faire des inférences ou tirer des présomptions de fait ou de droit qui sont susceptibles de découler des éléments de preuve et qui peuvent servir à établir l'existence d'une cause défendable. L'exemple classique est la causalité;
>
> - Une allégation relative à un élément factuel propre à un demandeur est tenue pour avérée, sauf si invraisemblable. Par exemple, l'allégation « La bouilloire que j'ai achetée ne fonctionne pas » doit être tenue pour avérée. L'allégation « J'ai été enlevé par des extra-terrestres » ne peut être tenue pour avérée car

---

70 *Ibid.*, par. 17.
71 *Id.*, par. 58 and 59.
72 *Ehouzou* c. *Manufacturers Life Insurance Company*, 2021 QCCA 1214, par. 40 and 41. Leave to the Supreme Court of Canada denied: *Patrick Ehouzou, et al.* v. *Manufacturers Life Insurance Company, et al.*, 2022 CanLII 21671 (SCC)
73 *Homsy* c. *Google*, 2022 QCCS 722, par. 20 [« *Homsy* »].
74 *Desjardins Financial Services Firm Inc.* v. *Asselin*, 2020 SCC 30, par. 17 ["***Asselin***"].
75 *Homsy,* par. 22.

> elle est invraisemblable. L'allégation « Ma bouilloire ne fonctionne pas car le fabricant a installé volontairement un élément chauffant défectueux » ne peut être tenue pour avérée sans aucun élément de preuve.
>
> [Court's underlinings]

[104] Insofar as legal premises of syllogisms are concerned, the authorization judge can deal with them as long as they raise pure questions of law and dismiss applications which are legally unfounded. However, he or she must be mindful that "it is in principle not appropriate at the authorization stage for the court to make any determination as to the merits in law of the conclusions in light of the facts being alleged". It suffices that the application not be "frivolous" or "clearly wrong" in law.[76]

[105] The Court of Appeal in *Pilon* has provided the following additional direction on how courts are to deal with claims which defendants plead are clearly wrong or untenable in law:[77]

> [12] Le juge peut, à l'étape de l'autorisation, statuer sur une question d'interprétation statutaire à la condition que l'analyse ne requière pas l'administration d'une preuve, étant entendu qu'il doit se garder de statuer ou d'évaluer la preuve présentée puisque cette analyse doit plutôt se faire sur le fond. Il peut cependant, lorsque cela est nécessaire pour trancher la question de droit et décider si les faits allégués paraissent justifier les conclusions recherchées, considérer ceux qui sont allégués par le requérant, lesquels sont alors tenus pour avéré. Le choix de statuer ou de plutôt déférer au juge du fond relève alors de la discrétion du juge.
>
> (...)
>
> [17] J'estime que le juge pouvait répondre à la question posée par l'appelante. Il n'aurait pas été dans une meilleure position après la présentation d'une preuve additionnelle puisque la demande pour autorisation comportait déjà et à elle seule toutes les propositions et allégations des faits utiles (alors tenus pour avérés). Bien que les contrats intervenus entre chacune des intimées et leurs clients pouvaient ne pas avoir été identiques, la faute qui leur est reprochée par l'appelante est la

---

[76] *Oratoire*, par. 58.
[77] *Pilon* c. *Banque Amex du Canada*, 2021 QCCA 414.

même pour toutes et le syllogisme juridique, identique à l'égard de toutes les intimées, repose sur une seule question de droit.

[The Court's underlinings; References omitted]

1.2 Analysis

[106] Throughout the proceedings, the Plaintiffs have insisted that they are presenting three syllogisms. The formulation of the three syllogisms has varied throughout the proceedings.

[107] The Court believes that syllogism #1 should be dealt with first and that syllogisms #2 and #3 should be dealt with, together, as they rest on the same Civil Code of Quebec, *CPA*, *Charter* and *EQA* dispositions and the same legal logic.

1.2.1 Syllogism 1

1.2.1.1 Plaintiffs premises and conclusions

[108] This first syllogism is concerned with the thermal effects caused by a SAR which exceeds the 1.6 W/gr per 1 gr. of tissue for head and trunk at the separation distances which manufacturers advertise.

[109] As a patent example of the unfortunate cut and paste transposition of arguments from the Cohen case to this Application, the Plaintiffs syllogism is formulated as follows:

> "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".

[110] When dealing with false or misleading representations as to the conformity to regulatory requirements, the Court considers Canadian statutory limits, not those in force in the USA. The Canadian standards are those set out in *RSS-102* (see General Remark #4). Despite this formulation of their syllogism, upon hearing and reading Plaintiffs arguments, it is clear they are indeed predicated on the Canadian regulatory scheme which follows in large part, but not entirely, the US regulatory scheme. Hence, the syllogism which the Court will examine will rather be formulated as follows:

> Cellphone models, including certain Defendants' models, when tested using the advertised separation distance emit EMF/SAR in excess of the RSS-102 limit of 1,6 W/kg.

[111] The premises and the conclusions of this first syllogism are as follows:

111.1. Apple and Samsung represent that they meet regulatory requirements insofar as SAR maximum levels are concerned.

111.2. As per Part I of the *CPA*, goods must conform to the statements or advertisements of the manufacturer as per s. 41 and 42 of the *CPA*. More generally, as per Part II of the *CPA* it is a prohibited practice to make false or misleading representations. A representation includes an affirmation, a behaviour or an omission as per s. 216 *CPA*.

111.3. In particular, as per ss. 238(a) *CPA*, no manufacturer may, falsely, by any means whatever "hold out that [it] is certified by a third person".

111.4. As per the *Radiocommuniation Regulations,* a manufacturer who distributes a cellphone in Canada must hold a TAC and must comply at all times with such TAC. In order for a TAC to be delivered, the Minister must be convinced that the cellphone meets all the applicable standards and applications.

111.5. *RSS-102* sets out the standards and applications for cellphones.

111.6. *RSS-102* adopts Health Canada Safety Code 6's restrictions on RF radiation. Hence, the maximum level of SAR for head, neck and trunk must not exceed 1.6 W/kg, calculated on 1 gr. of tissue.

111.7. SAR measurements are carried out on a phantom by a certified laboratory. Properly interpreted, *RSS-102* calls for SAR measurements to be conducted when a phone is placed 5mm from the prescribed liquid filled phantom. This is the "separation distance".

111.8. For purposes of certification, one Apple phone per model is tested by a certified laboratory hired by Apple. SAR is measured with a 5 mm separation distance from the phantom's trunk and at 0 mm from the phantom's head.

111.9. After certification and after TACs were issued, Apple phones were tested anew at the behest of a newspaper and a phone case manufacturer for SAR at a 5 mm separation distance (see details in General Remark #5.3). The tests showed exceedances of the 1.6 W/kg SAR for iPhone 7, X and 11.

111.10. Some Plaintiffs have Apple iPhones.

111.11. Hence, Apple is improperly advertising and representing to Plaintiffs that their phones meet applicable specifications. Plaintiffs Apple phones are not fit for their intended purpose and they have a latent defect.

111.12. For certification purposes, Samsung phones were tested at a separation distance of 15 mm. This is not a proper measurement of the SAR level, because the maximum separation is 5 mm if *RSS-102* is correctly interpreted.

111.13. Therefore Samsung is improperly advertising and representing to Plaintiffs that their phones meet applicable specifications. Plaintiffs Samsung phones are

not fit for their intended purpose and they have a latent defect.

111.14. In any event, both Samsung and iPhones have proximity sensors which reduce power when a person is close by. The presence of proximity sensors is undisputed as is described in the testing method IEEE 1528,[78] one of the two testing methods recognized by *RSS-102*.

111.15. These proximity sensors which reduce RF frequency act as "cheating mechanisms" voiding any testing results. Hence, any tests carried out are void for fraud.

111.16. Each of Plaintiffs is therefore entitled injunctive relief and to compensatory damages in the amount of $13,000 per annum for the radiation exposure and for the medical monitoring costs. They are also entitled to punitive damages.

1.2.1.2 The Court's analysis and conclusions

[112] The Court finds, for the three grounds explained below, that it is untenable for Plaintiffs to argue that the facts as alleged justify the conclusions sought.

- **First ground to deny the Application common to Apple and Samsung**

[113] A TAC was issued for each iPhone and Samsung phone (see General Remark #5.1 above). As per the regulatory scheme (see General Remark #4 above), this means that ISED recognizes that the phones were tested according to the applicable standards and specifications and that they meet such standards. Therefore, the phones were certified by ISED and all hold a TAC.

[114] In further compliance audits carried out by ISED (see General Remark #5.3 above), no Apple or Samsung phones failed to meet the applicable standards and specifications.

[115] The Court cannot substitute itself to the Minister of ISED (formerly the Minister of Industry) who is not even party to these proceedings.

[116] It is untenable to argue that the Defendants falsely advertise that they comply with regulatory requirements as regards SAR levels.

[117] Hence, syllogism 1 is untenable and the criteria of art. 575(2) CCP is not met.

[118] If the Court were wrong in this analysis of the determinative impact of the TACs on regulatory compliance, and that it must nevertheless determine the question, in abstraction of the TACs, it is still untenable to argue that Apple and Samsung falsely

---

[78] Exhibit P-25C.

advertised that they met the *RSS-102* limit of 1,6 W/kg at a 5 mm separation distance when tested using the advertised separation distance.

[119] The Court would also have concluded that such arguments are untenable as Plaintiffs do not meet their burden of demonstration. Here is why.

- **Second and third grounds of dismissal for Apple phones**

[120] For Apple, Plaintiffs' demonstration rests on the fact that RF Exposure Lab measured SAR values greater than 1,6W/kg maximum SAR limit for three iPhone 7 tests, an iPhone X and iPhone 11 test.

[121] Assuming, as it must, for the purposes of the Application, that these facts are true, it must be kept in mind that the Court when examining criteria 575(2) CCP must examine the Plaintiffs individual claim. No Plaintiffs have an iPhone X or 11. The tests on those two phones are of no assistance to the Court.

[122] Only DeCicco has an iPhone 7.

[123] It is only on the basis of the tests carried out on the iPhone 7 that DeCicco could perhaps meet his burden of demonstration.

[124] However, DeCicco's phone was not tested. Also, he does not allege that has felt thermal effects by way of a heating or nervous sensations. The Court is therefore in the exceptional circumstance that Plaintiff has not taken the most elementary step of demonstrating that his phone exceeds maximum SAR values. The Court is of the opinion that it is therefore impossible for him to meet his burden that his phone's SAR level exceeds 1.6 W/kg.

[125] This is therefore a second ground why syllogism #1 is untenable and the burden of demonstration for criteria 575(2) CCP is not met.

[126] Plaintiffs obviously rely on the fact that at the Authorization level, given the low evidentiary threshold, the Court can infer that the SAR limit tested by RF Exposure Lab is also exceeded when DeCicco operates his phone. Hence, the unknown fact, namely that DeCicco's phone exceeds SAR limits, can be inferred from the known fact, namely that three phones tested by RF Exposure Lab have exceeded SAR results.

[127] As already stated, speculation or hypotheses do not satisfy the burden of demonstration. They must be backed by "some evidence". It is true however that inferences can be drawn from the evidence and that these inferences can constitute "some evidence". However, the evidence provided by Plaintiffs cannot serve to support such an inference. Here is why.

[128] RF Exposure Lab's tests on the three iPhone 7s were carried out at the behest of a Chicago Tribune journalist. Plaintiffs file as an exhibit the Chicago Tribune Article that

summarized the findings. The article states that "the FCC said it would take the rare step of conducting its own testing over the next couple of months".[79] This begs the question: what were the FCC's findings. Plaintiffs do not allege what actually occurred, nor are any Chicago Tribune follow-up articles provided. Thus the facts presented are obviously incomplete and the incomplete state of the record should be of great concern to the Court.

[129] The exhibits filed by Apple drawn from the Cohen case however do provide the missing piece. They constitute clear and unequivocal evidence and must be considered by the Court at the Application stage according the Court of Appeal's teachings in *Subways*.[80] The Application record would be misleading and manifestly inaccurate if it would contain only to the initial RF Exposure Lab's result without also presenting the follow-up done by the FCC.

[130] Indeed, it is indisputable that the FCC did retest the phones. In its *amicus curiae* submissions, the FCC explained in detail how it followed up on the Chicago Tribune tests:[81]

> "Each cell phone model was tested for the specific bands of operations investigated by the Chicago Tribune's test laboratory under the same configuration identified in [Apple's] RF exposure compliance report submitted at the time of its application for equipment authorization." Report on FCC Testing at 6. Likewise, the "orientations" of the tested phones (i.e., their positioning) and the "test separation distances used for the FCC's SAR testing were the same as in each device's original certification filing" and consistent with applicable FCC-specified parameters. Ibid. Each iPhone was tested at a separation distance of 5 millimeters (i.e., 0.5 centimeters) because the phones are designed to operate against the body.
>
> (...)
>
> The FCC Laboratory published the results of its testing on December 10, 2019. See Report on FCC Testing at 8 (Table 2). It found that all of the tested phones "produced maximum l-g average SAR values less than the 1.6 W/kg limit specified in the FCC rules." Id. at 9. Specifically, the FCC Laboratory recorded a maximum measured SAR limit of 0.946 W/kg for the iPhone 7, 0.799 W/kg for the iPhone X, and 1.350 W/kg for the iPhone XS. Id. at 8 (Table 2). Based on the test results, the FCC Laboratory found no "evidence of violations of any FCC rules regarding maximum RF exposure levels." Id. at 9.
>
> [The Court's underlinings]

---

79 Exhibit P-3A.

80 *Durand* c. *Subway Franchise Systems of Canada*, 2020 QCCA 1647.

81 Exhibit APL-9.

[131] The honourable Justice William Alsup of the United States District Court, in granting summary judgment in October 2020 further noted the following:[82]

> Notably, the Chicago Tribune story that plaintiffs detailed extensively in the operative complaint spurred the Commission to investigate the Tribune's claims of noncompliance, as discussed. The FCC Lab tested commercially-available iPhones as well as a model iPhone provided by Apple, and each demonstrated compliance when tested at the test separation distances used in their original certification filing (not at two millimeters, as the Tribune additionally had) and consistent with OED's parameters. The Lab found no evidence of violations of the technical standards. Apple's iPhones have thus demonstrated compliance with its exposure limits not once but twice (Dkt. No. 104-11).
>
> [The Court's underlinings]

[132] In light of this unequivocal evidence, it would be improper for the Court, failing any test on DeCicco's phone, to draw an inference that given that the three iPhone 7 models tested by RF Exposure Lab exceeded SAR limits, DeCicco's phone would also have exceeded such limits.

[133] Hence, the Court concludes that DeCicco has not adduced "some evidence" that his iPhone 7exceeds the maximum 1.6W/kg SAR, which would take the Application out of the realm of pure speculation and hypothesis.

- **Second and third grounds for denying Application for Samsung phones**

[134] Samsung tests its phones at 15 mm from the phantom's head and trunk. Contrarily to Apple, Plaintiffs has no test results which show that at that a 15 mm separation distance, the SAR readings exceed 1.6W/kg.

[135] This is the second ground why syllogism #1 is untenable.

[136] However, Plaintiffs argue that the only proper interpretation of *RSS-102* is that phones must be tested at a maximum distance of 5 mm. Hence, Samsung would not be testing the phones at the correct separation distance mandated and could not state as it does that the phones are safe.

[137] The Court finds that Plaintiffs interpretation on which its argument is frivolous and untenable. Indeed, section 3 of *RSS-102* relates to SAR Measurements. Subsection 3.1.1 deals in particular with SAR Measurements of body-worn devices. Section 1 of *RSS-102* defines a body-worn device as "a device whose intended use includes transmitting with any portion of the device being held directly against a user's body". It is not disputed that cellphones are a "body-worn device". The parties disagree as to what constitutes the

---

82 Exhibit APL-12.

proper separation distance between the phantom and the phone. Plaintiffs say anywhere between 0 and 5 mm, while defendants say it is proper to test at 15 mm or less.

[138] The answer to this debate lies in the proper interpretation of subsection 3.1.1 the relevant extract of which reads as follows:

> 3.1.1 SAR Measurement of Body-Worn Devices
>
> In addition to the SAR standards mentioned in Section 3, the following provisions shall apply when performing SAR measurements for body-worn devices:
>
> (...)
>
> - If accessories are neither supplied nor made available by the manufacturer, a conservative minimum separation distance based on off-the-shelf body-worn accessories should be used to test body-worn devices. A separation distance of 15 mm or less between the device and the phantom is required. The device shall be positioned with either its back surface or front surface toward the phantom, whichever will result in the higher SAR value. If this cannot be determined, both positions shall be tested and the higher of the two SAR values shall be included in the RF technical brief cover sheet. The selected separation distance shall be clearly explained in the RF exposure technical brief to support the body-worn accessory test configurations.
>
> - Body-worn devices that are designed to operate on the body using lanyards or straps shall be tested using a test separation distance of 5 mm or less.
>
> - The head or body tissue equivalent liquid (see Annex D) for SAR measurement of body-worn devices shall be used. Information related to the tissue equivalent liquid shall be included in the RF exposure technical brief.

[139] As is more fully explained in the legal principles section set out above, as long as the statutory interpretation is not a mixed fact and law question, the Court may, and indeed should, carry out the statutory interpretation. A recourse cannot be authorized which is premised on a flawed statutory interpretation.

[140] The basic tenets of statutory interpretation, which must also apply to regulations and other statutory instruments, as prescribed by the Supreme Court of Canada and which are drawn from an extract of the work of Elmer Driedger and in later versions by Ruth Sulivan, are as follows:"the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament".[83]

[141] It is clear from the ordinary meaning of the words of ss. 3.1.1 of *RSS-102* that "Body-worn devices that are designed to operate on the body using lanyards" which calls

---

[83] Cited amongst other decisions in *Bell ExpressVu Limited Partnership* v. *Rex*, [2002] 2 S.C.R. 559, 2002 SCC 42, par. 26.

for a maximum 5 mm separation are a subset of a broader category of "body-worn devices".

[142] No allegations are made in the Application that cell phones are operated on the body using lanyards or straps. Furthermore, the Court cannot and will not take judicial notice of the fact that cellphones are "operated on the body using lanyards or straps".

[143] Hence, given that the 5 mm specific exception does not apply, one necessarily and unequivocally must revert to the more general separation distance of 15 mm. Samsung may therefore use a 15 mm separation distance to test its cellphones.

[144] This is therefore the third ground why Plaintiffs syllogism #1 is unfounded insofar as Samsung is concerned.

1.2.1.3 The "phony testing regimen"

[145] Plaintiffs make a last argument whereby they claim that the entire testing regimen is "phony" because proximity sensors lower the energy emitted during tests. Fraud corrupts everything and therefore no certification can stand.

[146] This argument is untenable. It is precisely the type of bald allegation that cannot meet the burden of demonstration unless supported by "some evidence".

[147] The phony testing regimen allegations are indeed purely speculative if not gratuitous.[84] There is no allegation that proximity sensors in fact lowered power during the testing. As Plaintiffs they themselves cite at the above cited par. 75 of the Application, both Samsung and Apple explain that they are testing at their "highest transmission level" or "highest cetified power level". The fact that the IEEE provides specific instructions how to test with proximity sensors does not demonstrate that tests carried out by Apple and Samsung use proximity sensors to defeat SAR measuring. All that can be drawn from this is that regulators are obviously well aware of these proximity sensors and they have certified the phones.

[148] The Court must also note that Plaintiffs arguments is ultimately self-defeating to their fundamental argument that the SAR levels are too high. The purpose of activating proximity sensors is precisely to reduce power when the phone is in close proximity to a person so as to reduce SAR.[85] If the proximity sensors operate, the whole issue of SAR limits at full power becomes moot.

---

[84] The word "phony" cannot be dissociated from the unforgettable character, Holden Caufield, in J.D. Salinger's *Catcher in the Rye*. The Court would be amiss not see a clear parallel between Plaintiffs peremptory use of the word phony to disqualify Defendants' testing and how Holden Caufield invokes the word "phony" to dismiss peremptorily many individuals or events.

[85] See exhibit P-25C and section 3.45 where the IEE provides the following definition of proximity sensors: "capacitive sensor or combination of sensors in the DUT utilized for the detection of user proximity for the purpose of limiting transmitter power in order to ensure compliance with RF exposure limits".

[149] The Court therefore concludes that the facts and legal arguments law which constitute the premises of syllogism #1 do not appear to justify the conclusions sought.

1.2.2 Syllogisms 2 and 3

[150] These syllogisms are argued in part or in whole in abstraction of *RSS-102*.

[151] Syllogism #2 remains concerned with thermal effects and exceedances of 1.6 W/gr per 1 gr. of tissue for head and trunk:

> 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 FCC.

[152] It however does not posit that testing be carried out at 5 mm. According to Plaintiffs, phones must be tested in real life conditions. Plaintiffs are of the view that in real life, people carry their phones in pockets and that therefore the true separation distance is only 2 mm. At this distance, there are numerous test results which show that all the phones far exceed the 1.6 W/gr SAR maximum calculated on gr. of tissue.

[153] Syllogism #3 no longer concerns itself with SAR limits and separation distances. It is concerned with the non-thermal effects of RF radiation per se. It is based on the fact that RF radiation is in of itself dangerous, a "toxic pollutant". Syllogism #3 is set out as follows in its Plan of Argument:

> Defendants' actions and omissions described above cause serious health damage to humans and the environment. These constitute a breach of fundamental rights, the Charters and justify the awarding of punitive damages.

[154] Plaintiff's counsel's representations and the Plan of Argument provide greater clarity. This syllogism rests on Plaintiffs assertion that the exhibits "unambiguously allege that exposure to cell phone SAR causes a myriad diseases in flaura [sic],fauna and humans".[86] Plaintiffs claim that the "industry" has been aware at least since 1997 of "evidence health damages (genotoxicity of RF EMR)".[87] A bit further, add to this list "menstrual and reproductive issues, sleep disorders, stress and other health effects resulting directly from and caused by "heavy cell use". [88] Hence, RF exposure is a danger which should be disclosed and Plaintiffs representations lack information and are misleading. The phones therefore have a latent defect.

[155] Hence, the Court understands that it in examining syllogisms #2 and #3, it will have to determine first whether it can accept as true, at the Application phase, the following allegations:

---

86 Plaintiffs Plan of Argument, par. 78.
87 *Ibid.*, par. 80.
88 *Ibid.*, par. 83.

155.1. That people wear phones at 2 mm from the body.

155.2. That at this distance, SAR measurements will necessarily exceed the SAR limit of 1.6 W/kg at 1g of tissue.

155.3. That this causes thermal effects and therefore a risk or danger.

155.4. That regardless of SAR values, RF exposure causes health damages, i.e. non thermal effects.

[156] For the reasons set out hereafter, given the exhibits filed, the Court finds that it must take these allegations as true.

[157] Then, as a second step, the Court must examine whether on the basis of the applicable legal principles, these facts appear to justify the conclusions.

[158] Plaintiffs raise a plethora of legal dispositions. The Court holds the following to be untenable on their face, without need for more comment than follows:

158.1. Art. 1465 CCQ: Plaintiffs suggest that the phone manufacturers are custodian of the thing,[89] namely the waves[90], and can be held responsible for the autonomous act of the thing, i.e. RF radiation exposure. This is simply wrong. Plaintiffs are custodian of the phones. Assuming it is true that RF exposure can cause damages, RF radiation exposure will stop as soon as Plaintiffs shut their phones off, regardless of what Samsung and Apple do. Art. 1465 CCQ is, simply, not applicable.

158.2. Art. 976 CCQ: in order to trigger this no fault liability regime, three conditions must be met: a neighbourhood relationship, inconveniences caused by the exercise of the right of ownership and such inconveniences being abnormal. Apple and Samsung are no the Plaintiffs' neighbours, even if one takes into account the most liberal interpretation of neighbour. If Plaintiffs stop emitting and transmitting, there will be no annoyance, regardless of what Apple and Samsung do. Art. 976 CCQ is also, simply, not applicable.

158.3. Art.19.1,20 and 21 of the *EQA*: RF radiation can clearly be a contaminant. Every person has a right to a healthy environment. Assuming that RF radiation is a contaminant, if is Plaintiffs who can shut their phones and stop their release. Furthermore, other than penal recourses, which Plaintiffs have no standing to exercise, and the injunction remedy of s. 19.2 EQA which cannot be applied since Plaintiffs own or operate the phones and they can shut them off, the *EQA* sets out a standard of conduct at s. 20 which would be relevant to determine if Samsung and Apple acted negligently but is not a legal remedy in of itself.

---

89 Art. 1465 CCQ.
90 Art. 906 CCQ.

[159] What is truly at stake here is whether it is tenable for Plaintiffs to claim that Apple and Samsung phones' have a safety defect in that Samsung and Apple have failed to properly warn Plaintiffs of the risk or danger associated with the use of their phones and that they misled them in this regard.

[160] The Application's fate rests on the Application rests on resolving the two fundamental questions:

160.1. Is it tenable to argue that Apple and Samsung has a safety defect? This calls into play art. 1457 and 1468-1469 CCQ, art 37 and 53 *CPA*, art. 20 of the EQA, art. 1 and 49 of the Quebec *Charter*.

160.2. Is it tenable to argue that Plaintiffs have made misrepresentations or provided inadequate information as to risk and danger? This in turn calls into play arts. 216, 219, 228, 238(a) and 253 of the CPA.

[161] The Court will therefore examine the factual premises underlying these syllogisms and then whether the legal premises can give way to the conclusions sought.

1.2.2.1 The factual premise

[162] There is no reason for the Court not to assume to be true the fact that phones are carried 2 mm close to the body.

[163] Oddly, however, Arial alleges that since owning her phone, she has taken precautionary measures to minimize her exposure" namely by "the use of air tube headphones, using speakerphone mode to avoid holding the phone to her head, and carrying the phone in a shielded radiation-reducing pouch when streaming media".[91] She clearly alleges that she does not carry the phone at 2mm from her body and she clearly demonstrates that she is aware of dangers related to RF exposure. Obviously, with such self-defeating allegations, she does not meet the burden of demonstration.

[164] However, Erika and Zoe Patton, Tasciyan, Nucciarone and DeCicco all allege that they carry phones close or on their body. For these Plaintiffs, the Court assumes that it is true that they carry their phones at 2 mm from their body.

[165] The Court also will also assume that it is true that at a separation distance of 2 mm, the SAR measurement of all phones necessarily exceed the 1.6 W/kg limit set by Health Canada. Even though no tests have been carried out on Plaintiffs' phones, this measurement can be inferred from the evidence filed. Indeed, the tests carried out by RF Exposure Lab and test data collected by the ANFR evidence that SAR increases the closer the phone is placed to the body to exceed the 1.6 W/kg SAR limit. A reputed scientist, Om Gandhi, analyzed the data collected by the ANFR and concluded that there is an "increase in SAR for each millimeter of proximal placement of the wireless device

---

[91] Application, par. 6.

varies from 10 to 30%", and an increase by a factor of 2 to 3 for a 5-millimeter separation. This suffices for the purposes of demonstration and on the necessity to provide "some evidence" to support a hypothesis or speculation.

[166] Defendants rightfully stress that the 1.6 W/kg limit set by Health Canada incorporates safety limits. [92] This may ultimately be fatal to Plaintiffs arguments but will be a matter for the merits. At the Application stage, Plaintiffs' burden is merely one of demonstration, and success must not even be a realistic possibility.

[167] The Court also must assume to be true, on the basis of the studies summarized in General Remark #6, that Plaintiffs have demonstrated, with some evidence, that there are non-thermal dangers associated with the use of cellphones.

[168] Defendants rightfully point out that Health Canada concluded in the 2015 issue of Safety Code 6, after reviewing the scientific literature published until 2013, that there is no evidence of non-thermal effects. However, the studies summarized in General Remark #6 postdate Safety Code 6.

[169] It may well be demonstrated by Defendants on the merits that Health Canada still maintains the same position today for good reason and that the Court should defer to this opinion. Indeed, it would appear that in the USA, the FCC has reviewed this literature in 2021 and still is of the opinion that there is no need to provide warnings or limits for non-thermal effects. On the other hand, the State of California appears to have come to the inverse conclusion. But all that is a matter for the merits.

1.2.2.2 The legal premise and the conclusions

[170] The Court will now deal with the legal general legal premises advanced by Plaintiffs dealing with the manufacturer's liability for a safety defect and for false and misleading representations.

[171] The Court of Appeal in *Imperial Tobacco*[93] has made an extensive study of all the articles cited by Plaintiffs in support of their syllogism in its decision maintaining the first instance judgment on the merits. It deals with the legal principles governing the remaining legal premises advanced by Plaintiffs in support of their syllogisms #2 and #3. The Court of Appeal in *Imperial Tobacco* casts the debate remarkably well:

> [231] Les biens dangereux en libre circulation abondent, en effet, et nombre d'entre eux sont même d'usage très courant. Ils sont fréquemment utiles, voire indispensables les dangers qu'ils présentent allant du moindre au grave. Sauf à mettre en péril des pans entiers de l'industrie et du commerce, on imagine donc

---

92 See exhibit P-26, p. 3 : To ensure that thermal effects are avoided, safety factors have been incorporated into the exposure limits,

93 *Imperial Tobacco Canada ltée* c. *Conseil québécois sur le tabac et la santé*, 2019 QCCA 358 [« Imperial Tobacco »].

> assez mal de trouver une faute dans le seul fait, en soi, de fabriquer pareils biens et de les mettre en marché, c'est-à-dire d'y voir, au sens des articles 1053 C.c.B.C. ou 1457 C.c.Q., une contravention à l'obligation générale incombant à chacun de ne pas nuire à autrui, par le « manquement à un devoir préexistant ou la violation d'une norme de conduite ».
>
> (...)
>
> [233] C'est plutôt dans le devoir d'information incombant aux concepteurs, fabricants, vendeurs, distributeurs ou autres acteurs de la chaîne de distribution, ainsi que dans son corollaire, la connaissance de l'usager, que le droit voit habituellement la façon de gérer le risque afférent aux biens intrinsèquement dangereux et de régler la responsabilité civile de ceux et celles qui les mettent en marché (lorsque cela n'est pas interdit par l'État).
>
> [234] Quant à la question de savoir s'il peut être fautif de s'adonner à la publicité (quelle qu'en soit la forme, incluant l'étiquetage) et au marchandisage d'un bien dangereux, la réponse, là encore, dépend entièrement des circonstances. Certes, on ne s'attend pas à ce que le fabricant dénigre son propre produit, mais la publicité qu'on en fait respecte-t-elle les normes gouvernementales applicables (s'il en est) et, dans l'affirmative, cela suffit-il? À quel auditoire cette publicité s'adresse-t-elle? S'accompagne-t-elle ou non d'une information adéquate? Est-elle, au contraire, trompeuse? C'est, en l'occurrence, le noeud du litige et c'est bien là ce qui, en définitive, se trouve au coeur de l'analyse du juge : « portraying smoking in a positive light » n'est peut-être pas, en soi, une faute267, mais le faire à la manière des appelantes en serait une.
>
> [The Court's underlinings]

- **Preliminary remarks on RSS-102**

[172] Prior to analyzing these legal texts, the Court must deal with Plaintiffs' argument that the regulatory structure set in place, including *RSS-102*, is invalid and inoperative. According to Plaintiffs, the *Radiommunication Regulations* do not indicate what applicable standards apply. They add that this function is improperly sub-delegated to the Minister of ISED. They believe that *RSS-102* improperly incorporates the Safety Code 6 and it improperly defers to a foreign state, the USA, for purposes of setting the standards and specifications for phones and testing. Also, they plead that the use of the expression "body-worn" in RSS-102 is void for vagueness.

[173] These positions are manifestly unfounded, untenable and frivolous for the following reasons:

173.1. The Attorney General of Canada, whose role is to defend the validity of legislation, is not a defendant or an intervenant hereto. Samsung and Apple are not the proper defendants for such a debate.

173.2. If Plaintiffs who are third parties to the TACs, want the courts to declare the regulatory system under which the TACs were issued to be inoperative, they must do so through judicial review as per art. 529(1) CCP, as long as the reviewing court agrees that they have public standing to do so as per the second paragraph of article 85 CCP. The Court of Appeal in *D'Amico* has explained why class actions are ill-suited for this type of recourse.[94] The exception carved out in *Allard* cannot be invoked.[95]

173.3. In any event, Parliament through the *Radiocommunication Act* clearly empowers the Minister of ISED (formerly minister of Industry) to issue TACs, to set the terms and conditions for the issuance of such and to establish technical requirements and standards in relation to cell phones (see General Remark #4). *RSS-102* is a valid exercise of that power. *RSS-102* may incorporate by reference Canadian documents (Safety Code 6) or US documents (IEEE 1528). Section 3.1.1 of *RSS-102* which deals with SAR measurements is clear and unambiguous.

[174] In their Plan of argument, Plaintiffs, after having set out all its arguments as to the inoperative and invalid character of the regulatory context, make the following frankly bewildering statement:

> 40. Petitioners respectfully submit that it is preferable that this Honourable Court, rather than strike down or deem inoperable the entirety of the radiocommunication legislation as concerns testing, certifying, health protection, instead, interpret that legislation honestly, meaningfully, and in a manner that protects the fundamental rights of all Quebecers.

[175] If Plaintiffs thereby suggest that the Courts must interpret statutes, regulations and other statutory instruments in a manner consistent with the object of the Act, and that one of these objects is that the *RSS-102* must be interpreted so as to protect radio apparatus users, the Court agrees. If they say more than that and call on this Court to modify clear regulation, then the Court cannot agree. The Court's role is to apply the laws, regulations or statutory instruments enacted by Parliament or adopted by the Governor in Council or a Minister, unless they are declared invalid or inoperative, because they are inconsistent, inter alia, with the *Constitutional Act of 1876* and the *Charter* or the governing statute.

- ***Manufacturer's liability for a safety defect***

[176] The relevant dispositions governing the manufacturer's liability for a safety defect are found in the Civil Code of Quebec and the *CPA*.

---

[94] *D'Amico* c. *Procureure générale du Québec*, 2019 QCCA 1922, par. 51 to 61; application for leave to the Supreme Court of Canada was dismissed: *Lisa D'Amico, et al.* c. *Procureure générale du Québec*, 2020 CanLII 33847 (CSC),

[95] *Allard* c. *Procureur général du Québec*, 2022 QCCA 686

[177] Articles 1468, 1469 and 1473 CCQ read as follows:

> 1468. The manufacturer of a movable thing is bound to make reparation for injury caused to a third person by reason of a safety defect in the thing, even if it is incorporated with or placed in an immovable for the service or operation of the immovable.
>
> The same rule applies to a person who distributes the thing under his name or as his own and to any supplier of the thing, whether a wholesaler or a retailer and whether or not he imported the thing.
>
> 1469. A thing has a safety defect where, having regard to all the circumstances, it does not afford the safety which a person is normally entitled to expect, particularly by reason of a defect in design or manufacture, poor preservation or presentation, or the lack of sufficient indications as to the risks and dangers it involves or as to the means to avoid them.
>
> 1473. The manufacturer, distributor or supplier of a movable thing is not bound to make reparation for injury caused by a safety defect in the thing if he proves that the victim knew or could have known of the defect, or could have foreseen the injury.
>
> Nor is he bound to make reparation if he proves that, according to the state of knowledge at the time that he manufactured, distributed or supplied the thing, the existence of the defect could not have been known, and that he was not neglectful of his duty to provide information when he became aware of the defect
>
> [The Court's underlinings]

[178] Sections 37 and 53 of the CPA read as follows:

> 37. Goods forming the object of a contract must be fit for the purposes for which goods of that kind are ordinarily used.
>
> 53. A consumer who has entered into a contract with a merchant is entitled to exercise directly against the merchant or the manufacturer a recourse based on a latent defect in the goods forming the object of the contract, unless the consumer could have discovered the defect by an ordinary examination.
>
> The same rule applies where there is a lack of instructions necessary for the protection of the user against a risk or danger of which he would otherwise be unaware.
>
> The merchant or the manufacturer shall not plead that he was unaware of the defect or lack of instructions.
>
> The rights of action against the manufacturer may be exercised by any consumer who is a subsequent purchaser of the goods.

[The Court's underlinings]

[179] The warranty against latent defects as per the first paragraph of s. 53 CPA, is intimately related to the warranty against latent defects of the Civil Code of Quebec set out at art. 1726 CCQ, even though it offers certain more advantageous presumptions to the consumer. Hence, it can only be invoked if the risk or danger results in a material or functional defect (*défectuosité matérielle ou fonctionnelle*).[96] The Court of Appeal in Imperial Tobacco explains this as follows:

> [207] Lus en parallèle, ces passages de l'arrêt ABB Inc. indiquent que le danger d'un produit mis en marché sans l'information relative au risque que présente son usage ou les renseignements nécessaires à son utilisation sécuritaire n'est pas un « défaut » au sens de l'article 1522 C.c.B.C. ni un « vice » au sens de l'article 1726 C.c.Q., à moins que ce danger ne résulte d'une défectuosité matérielle (c'est-à-dire un défaut de fabrication, de production ou d'entreposage), d'un défaut fonctionnel (c'est-à-dire un défaut de conception) ou même, on peut l'imaginer, d'un défaut conventionnel (c'est-à-dire impossibilité ou difficulté à se servir du bien à une fin spécifique voulue par l'acheteur et dénoncée au vendeur) En d'autres mots, le danger issu d'un défaut matériel ou fonctionnel (ou même conventionnel) serait un vice donnant prise à la garantie de qualité et au recours contractuel qui y est associé, mais non pas le danger afférent au bien qui n'est affecté d'aucun défaut de cette sorte, l'absence de vice faisant dès lors obstacle à l'enclenchement de la garantie de qualité des articles 1522 et suivants C.c.B.C. ou 1726 et suivants C.c.Q.
>
> (...)
>
> [216] Bref, le défaut de sécurité qui ne résulte pas d'une défectuosité du bien mais d'un manquement à l'obligation de renseignement du fabricant n'est pas, selon la Cour suprême dans ABB inc. c. Domtar inc., précité, un vice caché au sens des articles 1726 et suivants C.c.Q. et n'enclenche pas la garantie de qualité (que ce soit par le moyen de l'article 1730 ou celui de l'article 1442 C.c.Q.).
>
> [The Court's underlinings; references omitted]

[180] The same must be true for the warranty of s. 37 *CPA* which provides that the good must be fit for the purpose for which it is ordinarily used. As the Court Appeal has indicated in *Mazda*, "les garanties consacrées aux articles 37 et 38 de cette loi ne sont qu'une application particulière de la notion de vice caché".[97] Consequently, a danger which does not materially or functionally reduce a good's use cannot be held to be unfit for its intended purpose.

---

96 Ibid., par. 466.

97 *Fortin* c. *Mazda Canada inc.*, 2016 QCCA 31, par. 58.

[181] Just as in the tobacco litigation where the cigarettes were not affected with a functional or material defect, the phones here do not have a functional or material defect. There is no *défectuosité matérielle ou fonctionnelle*.

[182] Hence, s. 37 and the first paragraph of s. 53 CPA are inapplicable and any recourse based on these sections is untenable.

[183] At stake is rather whether the cellphones pose a "risk or danger" (*risque ou danger*) and the manufacturer's duty to inform the consumer of such risk or danger. This calls into play the second paragraph of art. 53 *CPA*. Indeed, a consumer can take recourse directly against a manufacturer for a "lack of instruction necessary for the protection of the user against a risk or danger of which he would otherwise be unaware". This second paragraph of s. 53 *CPA* mirrors art. 1468 which allows a person who has suffered prejudice from a "safety defect" to sue the manufacturer. Art. 1469 CCQ extends the notion of "safety defect" to situations where there is a "lack of sufficient indications as to the risks and dangers it involves or has the means to avoid".

[184] Necessarily, a consumer's claim will therefore rest both on art. 1468-1469 CCQ and on the second paragraph or s. 53 CPA. They may be invoked concurrently.[98]

[185] The *CPA* must be given a broad and liberal interpretation.[99] So must also art. 1468 and 1469 CCQ.[100]

[186] Both regimes are ultimately concerned with safety defects even though the *CPA* is somewhat more advantageous to the aggrieved party. Art. 1469 posits three situations which may give rise to a security defect. It is the third that concerns Plaintiffs, namely where "a thing has a safety defect where, having regard to all the circumstances, it does not afford the safety which a person is normally intended to expect particularly [...] by reason of the lack of sufficient indications as to the risks and dangers it involves or as to the means to avoid them".

[187] In *Laboratoires Abbott*,[101] Justice Ruel writing on behalf of the Court of Appeal, reflects on the whys and wherefores of the notion "sufficient indications as to the risks or dangers" and why insufficient indications constitute a safety defect:

> [80] Par ce régime, le législateur cherche à protéger les usagers contre les dangers d'un bien que le fabricant leur fait courir. Il faut évaluer les dangers en fonction des circonstances, incluant la nature du bien, son utilisation, la clientèle visée, la gravité ou la prévisibilité d'un préjudice, le tout, compte tenu des attentes raisonnables que l'usager ordinaire peut normalement entretenir à l'égard de la sécurité du bien en question.

---

98 *Imperial Tobacco*, par. 424.
99 *Richard* c. *Time Inc.*, 2012 CSC 8, [2012] 1 R.C.S. 265 , par. 103 ["*Time*"].
100 *Imperial Tobacco*., par. 300.
101 *Brousseau* c. *Laboratoires Abbott limitée*, 2019 QCCA 801 [« *Laboratoires Abbott* »].

> [81] Selon l'article 1469 du Code civil du Québec, l'absence d'indications suffisantes quant aux dangers d'un bien ou quant aux moyens de s'en prémunir est donc assimilée à un défaut de sécurité.
>
> [82] En effet, la transmission d'informations adéquates sur les dangers d'un bien par le fabricant permet aux utilisateurs d'exercer un choix éclairé de se le procurer ou non, de l'utiliser, de cesser son utilisation ou de questionner le fabricant ou des intermédiaires qualifiés en vue de se prémunir ou de se protéger à l'encontre de la matérialisation des risques et dangers qu'il comporte.
>
> [83] L'information doit être précise et les mises en garde transmises par le fabricant doivent être suffisantes pour que l'utilisateur « réalise pleinement le danger et le risque associé à l'usage du bien ainsi que ses conséquences potentielles et sache quoi faire (ou ne pas faire) pour s'en protéger ou, le cas échéant, y remédier ».
>
> (...)
>
> [86] En somme, « le fabricant a le devoir de renseigner les usagers sur les risques et dangers que présente le bien et la manière de s'en protéger et, s'il manque à ce devoir, le bien n'offrant alors pas la sécurité à laquelle on est normalement en droit de s'attendre, il encourt [sa] responsabilité ».
>
> [The Court's underlinings; references omitted]

[188] Art. 1468 and 1469 impose "au fabricant une lourde responsabilité, sans faute, de la nature d'une garantie de sécurité".[102]

[189] All this having been said, the Court finds that it is tenable to argue that:

189.1. A consumer regularly holds his or her cellphone at 2 mm from his or her body and that at that distance SAR measurements will exceed the maximum SAR limit set in Safety Code 6 and RSS-102.

189.2. SAR limits set out in Safety Code 6 and RSS-102 are intended to ensure safe RF exposure levels;

189.3. Exceedances of these limits, may thus pose a "risk or danger".

189.4. The user should be given "sufficient indication" as to these risks and dangers and "the means to avoid them" as per s. 1469 CCQ and "instructions necessary for the protection of the user against [this] risk or danger" as per the second paragraph of s. 53 *CPA*.

189.5. The "lack of sufficient indications" gives rise to a safety defect under art. 1468-1469 CCQ and s. 53 *CPA* and Plaintiffs may seek reparation for the injury

---

[102] *Imperial Tobacco*, par. 286.

caused by such safety defect from the manufacturer.

189.6. The lack of instructions allows for a direct recourse against the manufacturer under the second paragraph of s. 53 *CPA*.

[190] The risks or dangers that must be divulgated under s. 1468-1469 CCQ and 53 *CPA* are not only those known at the time of manufacture but also those that appear thereafter.[103]

[191] Samsung argues that Health Canada and ISED, who are entrusted by the Canadian State to reflect on and provide appropriate standards and specifications, do not call for tests at 2 mm nor do they deem it necessary to impose any obligations on manufacturers regarding RF radiation exposure generally (save for SAR at 0-15 mm separation distance) and for potential non-thermal effects in particular. Thus, it cannot be a reasonable safety expectation of a user (*la sécurité à laquelle on est normalement en droit de s'attendre*) to receive instructions or warnings regarding RF exposure other than for thermal effects within the measurement range provided by *RSS-102*.

[192] No doubt this is a weighty argument. But what "a person is normally entitled to expect" is not to be decided solely by what the regulator has decided should be of concern. Again, Justice Ruel, writing for the Court of Appeal in *Laboratoires Abbott,* reasons as follows:[104]

> [158] En somme, ce n'est pas parce qu'un fabricant pharmaceutique satisfait aux exigences réglementaires mises en œuvre par Santé Canada qu'il remplit son obligation civile d'information.
>
> [159] Cela étant dit, le fait que les normes statutaires ou réglementaires aient été respectées peut *tendre à indiquer* que le fabricant a satisfait son obligation d'information. Par exemple, dans l'affaire Andersen v. St-Jude Medical inc. de la Cour supérieure de l'Ontario, la juge a pris en considération le fait que Santé Canada avait approuvé l'appareil médical en cause (soit une valve cardiaque) pour conclure que le fabricant avait fait preuve de diligence.
>
> [160] Le respect des normes statutaires ou réglementaires constitue donc un élément à considérer dans l'évaluation de la diligence d'un fabricant pharmaceutique quant à son obligation d'information, mais n'est pas en soi déterminant.

[193] Hence, at the Application stage, the fact that Safety Conduct 6 and *RSS-102* mandate that only thermal effects must be considered and that testing done up to 15 mm from the phantom which respects SAR limits will meet applicable standards, does not render Plaintiffs claim untenable.

---

[103] *Ibid.*, par. 298 and 430.
[104] *Laboratoires Abbott*, par. 158 to 160.

[194] However, even though the Court sees it tenable that there is a safety defect, Plaintiffs must then demonstrate that they are entitled to the remedies or conclusions they are asking. They do not, save for punitive damages.

[195] Under the Civil Code of Quebec reparation is only owed for an injury caused by the safety defect. The Court of Appeal reiterates this repeatedly in *Imperial Tobacco*.[105] Obviously, in that case, the class members prejudice was well established:

> [408] (...) Les intimés ont aussi établi le préjudice : cancers (poumon, gorge) et emphysème dans le cas des membres du groupe Blais, toxicomanie dans le cas des membres du groupe Létourneau.

[196] Also, in pharmaceutical class action applications, patients always allege a condition or disease. [106]

[197] Furthermore, case law has widely accepted that at Application level at least, the causal link may be demonstrated by epidemiological studies.[107]

[198] However, injury itself cannot be inferred from epidemiological studies. It must be proven. In the context of the Application, it must be alleged.

[199] No prejudice is alleged by Plaintiffs.

[200] Despite the numerous modifications of the Applications, it still contains not a single allegation that any of the Plaintiffs suffer any disease or condition that they could then tie back, through epidemiological studies, to a safety defect. Plaintiffs fully well realized this when preparing their Plan of Argument and while pleading. Rather than providing such evidence, they made this argument in their Plan of Argument:

> 78. Though, unfortunately, the Representatives' personal health claims for bodily injury and/or stress caused by SAR were inadvertently not added to the re-amended application, nonetheless, they were alleged in the testimony of three of the Representatives, both before the Collective Action Fund and the TAQ (on a de novo hearing). The TAQ correctly summarizes them as follows (Representative Tracey Arial testified before the Fonds d'aide aux actions collectives to sleep disruptions relative to EMF, but these allegations were not summarized by the TAQ as the testimony was not repeated before the TAQ).
>
> > [86] Comme le Fonds, le Tribunal est aussi d'avis qu'il y a certaines allégations factuelles qui sont vagues, générales et imprécises,

---

105 Amongst others at par. 365 and 406.

106 *Letarte* c. *Bayer inc.*, 2019 QCCS 934, par. 6 : saignements abondants et caillots de sang lors des menstruations, douleurs pelviennes, ballonnements et prise de poids; *Gagnon* c. *Intervet Canada Corp.*, 2022 QCCA 553, par. 50 : le chien Willy avait des problèmes de peau et une diarrhée hémorragique; le chien Snoopy, des hémorragies mutisystémiques.

107 See the aforementionned study by Khoury and Schurr.

> particulièrement celles relatives au syllogisme 3, soit les dommages sérieux à la santé.
>
> [87] En effet, les faits allégués concernant les problèmes de santé des requérantes Zoe Patton et Claire O'Brien démontrent des faiblesses rendant difficile l'établissement d'une cause défendable à cet égard.
>
> [88] Lors de son témoignage devant le Tribunal, Zoe Patton a confirmé que son médecin n'a pas été en mesure de relier ses problèmes de cycles menstruels à l'utilisation de son cellulaire. Quant à Claire O'Brien, les faits allégués ne reposent que sur son témoignage voulant que l'utilisation de cellulaire engendre un stress pour elle.
>
> [89] Toutefois, le Tribunal considère qu'il y a des allégations factuelles qui permettent d'établir l'existence d'une cause défendable relativement aux syllogismes 1 et 2.
>
> [90] Effectivement, les faits allégués voulant que les téléphones cellulaires émettent des radiofréquences a des niveaux qui contreviennent à des normes et qu'ils ne sont pas sécuritaires pour l'usage prévu, contrairement aux publicités promouvant un usage près ou contre le corps, sont suffisamment précis et soutenus par une preuve documentaire pour être tenus pour avérés.

[201] This last ditch effort is wholly unconvincing. Plans of argument are no substitute for missing allegations. Also cross referencing to evidence summarized by the TAQ is also totally inappropriate and insufficient. In the case of Arial, it is not even the TAQ's decision that is referred to in the above cited par. 78 of the Plan of Argumentation, but rather Arial's testimony before the Fonds d'aide aux actions collectives for which no record is provided.

[202] Since each and every Plaintiff fails to demonstrate injury under art. 1468-1469, their claims for a safety defect under the Civil Code of Quebec are therefore untenable. Art. 1468 and 1469 CCQ being an « incarnation particulière, dans le cas du fabricant, de l'article 1457 C.c.Q. »,[108] any claim under art. 1457 is also untenable. The same goes for any argument relying on s. 1 of the Quebec Charter.

[203] The failure to allege damages was also found to be fatal by Justice Daniel Dumais in *Volkswagen Group Canada* in deciding the application for authorization to institute a class action regarding what has come to be known as Dieselgate in. Even though in that case it was inescapable that Volkswagen had installed a mechanism which allowed it to get around the regulatory emission requirement dealing with No_x emissions, class members who were not the buyers of the vehicles, but rather the inhabitants of the province of Québec, did not prove an injury flowing from the increased emissions. Justice

---

[108] *Imperial Tobacco*, par. 310.

Dumais therefore concluded that compensation could not be given for a purely hypothetical and the risk of an eventual medical condition.[109]

[204] The situation under the *CPA* is however different than that under the CCQ insofar as injury or prejudice is concerned. S. 53 does require *per se* the presence of injury. The violation of the *CPA* is seen in of itself as a prejudice which entitles the consumer to have resort to the contractual remedies set out at s. 272 *CPA*. Prejudice is presumed by the mere fact that the contract was entered into. As the Court of Appeal explains in *Imperial Tobacco*:

> [431] Quel type de recours le consommateur peut-il exercer à l'encontre du fabricant dans le cas d'un défaut de sécurité visé par l'article 53 al. 2 L.p.c.? L'article 272 L.p.c. présente une variété de possibilités : l'exécution de l'obligation de la partie adverse, la réduction de sa propre obligation, la résiliation, la résolution ou la nullité du contrat, des dommages-intérêts compensatoires (pour le cas où l'utilisation du bien lui aurait causé préjudice) ainsi que des dommages punitifs. On comprend aussi que, lorsque le consommateur est un sous-acquéreur, victime d'un préjudice, qui poursuit le fabricant (avec lequel il n'a pas contracté), c'est l'action en dommages-intérêts (avec ou sans dommages punitifs) qui sera de mise. S'il n'y a pas de préjudice, seuls des dommages punitifs pourraient être réclamés du fabricant.

[205] Theoretically, S. 272 of the *CPA* provides a broad range of contractual remedies:

> 272. If the merchant or the manufacturer fails to fulfil an obligation imposed on him by this Act, by the regulations or by a voluntary undertaking made under section 314 or whose application has been extended by an order under section 315.1, the consumer may demand, as the case may be, subject to the other recourses provided by this Act,
>
> (a) the specific performance of the obligation;
>
> (b) the authorization to execute it at the merchant's or manufacturer's expense;
>
> (c) that his obligations be reduced;
>
> (d) that the contract be rescinded;
>
> (e) that the contract be set aside; or
>
> (f) that the contract be annulled,

---

[109] *Association québécoise de lutte contre la pollution atmosphérique* c. *Volkswagen Group Canada Inc.*, 2018 QCCS 174, par. 44 to 48; leave to appeal refused by the Court of Appeal and the Supreme Court of Canada: *Volkswagen Group Canada Inc.* c. *Association québécoise de lutte contre la pollution atmosphérique*, 2018 QCCA 1034; appeal in the Supreme Court of Canada dismissed: *Volkswagen Group Canada Inc.* c. *Association québécoise de lutte contre la pollution atmosphérique*, 2019 CSC 53

without prejudice to his claim in damages, in all cases. He may also claim punitive damages.

[206] Hence, subject to such remedy not being manifestly inappropriate, Plaintiffs could have exercised any of these six rights. [110] Plaintiffs however do not seek any of these six contractual remedies, but rather the orders that follow:

> **CONDEMN** Defendants to solidarily pay to group members the sum of thirteen thousand dollars per year (13 000 $), per member, for the past three (3) years and for each additional year until such time as the radiation pollution is curtailed, with interest at the legal rate as well as the special indemnity provide for at article 1619 du C.C.Q. calculated from the date of Notice;
>
> **CONDEMN** Defendants to pay to group members the cost of medical monitoring;
>
> **ORDER** Defendants to publicize Non-Ionizing Radiation Protection EMF hazard warning signs for wireless users of Affected mobile phones and determine the content and location of those warnings;
>
> **ORDER** Defendants lower the level of radiation pollution (SAR) to an acceptable level, in the manners set out at para. 116, at their sole expense and within six (6) months;

[207] None of these conclusions can be awarded.

[208] The first two conclusions deal with claims for damages. Claims in damages are autonomous from the contractual remedies of s. 272 as the Supreme Court of Canada explains in *Time* and cannot benefit from the legal presumption of prejudice:

> [126] Nevertheless, the independence of the recourse in damages provided for in s. 272 C.P.A. does not mean that there is no legal framework for exercising it. First of all, the recourse in damages, regardless of whether it is based on a breach of contract or a fault, must be exercised in accordance with the rule concerning the legal interest required to institute proceedings under that provision. Next, where a consumer chooses to claim damages from the merchant or manufacturer he or she is suing, the exercise of the recourse is subject to the general rules of Quebec civil law. In particular, an award of compensatory damages can be obtained only if the prejudice suffered can be assessed or quantified.
>
> [The Court's underlinings]

[209] Given the absence of any allegations of injury, there can be no claim for compensatory damages.

---

[110] The only claim for specific performance in matters of failure to provide instructions would be to inform the parties of the safety defect which really serves no purpose if class members are now aware of the risk or danger. Also, a price reduction would be inappropriate as Plaintiffs allegations do not even establish that a sale has occurred, at what price and what reduction they are asking for.

[210] The two last conclusions seeking injunctive relief are manifestly non-executory and unrelated to remedying the safety defect. As the Court of Appeal has indicated: "le juge de qui on sollicite ce remède doit de toute nécessité considérer le caractère exécutoire de l'ordonnance qu'il s'apprête à émettre". [111] Vague and imprecise conclusions do not meet this requirement. There are such insurmountable problems with the conclusions sought by Plaintiff.

[211] What is a "EMF hazard warning sign" in the third conclusion? What would it contain? The Court has no idea.

[212] In the fourth conclusion, the reference to par. 116 is obviously erroneous. Most likely, the reference should have been to par. 121 and in particular the second of the 4 injunctive reliefs listed. No comment is needed to explain how untenable it would be for this Court to authorize such a conclusion. A simple reproduction of the conclusion will suffice:

> Second, given members' overexposure, they are entitled to a software fix that reduces the level of radiation transmitted by the phones, to the lower of either the actual SAR advertised on the phones, or that which is safe. Such a software fix would create "polling only when required". The software fix would diminish i) frequency, i.e,, how often the phone receives transmissions, ii) intensity, how strong the signal transmitted is and iii) volume, i.e., how much data is transmitted; In the alternative class members are entitled to replacement phones with similar functionality but emitting only a safe level of radiation (a consumer recall);

[213] The four above mentioned conclusions do not explicitly seek punitive damages, but the Court deems that it is clearly an oversight on Plaintiffs part, as their first set of conclusions entitled "WHERETOFORE" indicates that Plaintiffs seek authorization for "(d) award of punitive damages pursuant to the Quebec Consumer Protection Act".

> WHEREFORE, Plaintiffs and members of the Classes seek Authorization against Defendants, as follows:
>
> (a) Certifying the classes and subclasses and recognizing them as Representatives
>
> (b) Finding against Defendants as concerns the injunctive relief sought;
>
> (c) Awarding Plaintiffs and the Class the costs of medical monitoring, damages suffered by Plaintiffs and the Class, restitution to Plaintiffs and the Class of all monies wrongfully obtained by Defendant;
>
> (d) Award of Punitive damages pursuant to the Quebec Consumer Protection Act;

---

[111] *Dargaud éditeur* c. *Presse import Léo Brunelle inc.,* 1990 CanLII 3768 (QC CA),

> (e) Replacement of all models referred to with safe telephones of equivalent value and functionality, provision of re-directive shielding, and /or a software patch reducing emissions;
>
> (f) Such other and further relief that the Court deems just and proper.

[214] Punitive damages can be claimed even if there is no prejudice. The Supreme Court in *Time* finds that "consumers can be awarded punitive damages under s. 272 C.P.A. even if they are not awarded contractual remedies or compensatory damages at the same time". [112]

[215] Punitive damages can be awarded, amongst other conduct, if Apple and Samsung conduct display ignorance, carelessness or serious negligence with respect to their obligations and consumers' rights under the *CPA*. However, before awarding such damages, the court must consider the whole of the merchant's conduct at the time of and after the violation.

[216] Plaintiffs' proceedings, often using unfortunate hyperbolic language, explain at length how careless and negligent Apple and Samsung are in not disclosing the risk or danger of exceeding SAR limits when phones are placed close to the body and more generally of non-thermal risks of RF radiation exposure. This meets their limited burden.[113]

[217] It may well be advanced by Apple and Samsung, in order to counter such affirmations, that by following Heath Canada's Safety Code 6 indications and *RSS-102* SAR measurement method, they can in no way be seen as acting negligently or carelessly. That however is a question for the merits. Once again, such an argument is weighty, but given the very limited burden of Plaintiffs, the Court holds that they have met the burden of demonstration, exclusively as regards punitive damages.

- **False or misleading representation**

[218] Title II of the *CPA* deals with prohibited practices and a number of these practices deal with false or misleading representations. Plaintiffs rely heavily on a number of the articles in this Title, namely:

> 216. For the purposes of this title, representation includes an affirmation, a behaviour or an omission.
>
> 219. No merchant, manufacturer or advertiser may, by any means whatever, make false or misleading representations to a consumer.
>
> 228. No merchant, manufacturer or advertiser may fail to mention an important fact in any representation made to a consumer.

---

[112] *Time*, par. 147.
[113] *Nashen* c. *Station Mont-Tremblant*, 2022 QCCA 415, par. 39.

> 238. No merchant, manufacturer or advertiser may, falsely, by any means whatever,
>
> (a) hold out that he is certified, recommended, sponsored or approved by a third person, or that he is affiliated or associated with the latter;

[219] What allegedly false or misleading representations were made and when?

[220] Paragraphs 23 to 33 of the Application are the only potentially relevant paragraphs. They are cut and pasted from the Cohen case. They and make reference to advertisements which show phones being worn close to the body. No allegation is made anywhere in the Application that these advertisements were seen by Plaintiffs prior to purchasing the cellphones. Once again, this is an essential allegation failing which the allegations cannot be held to be true. The Court cannot infer this.

[221] Plaintiffs do not allege that they have seen Apple's legal notices or Samsung's user manuals prior to purchasing the phones. Well to the contrary, they have even resisted filing of same. In any event, user manuals would most likely have been consulted after the purchase. False or misleading representations must be made prior to the contract.

[222] That being said, if the Court finds that there was a lack of instructions necessary for the protection of the user against a risk or danger, it is also tenable that Apple and Samsung failed to mention an important fact within the meaning of s. 228.

[223] As per the Supreme Court of Canada in *Time*, this would constitute a prohibited practice, tantamount to fraud, giving rise to a presumption of prejudice for the purpose of s. 272 *CPA*, as long as the four conditions set out in *Time* are met. But once again, that leads to the same problem as in the recourse under s. 53 CPA. If damages are sought, the ordinary rules of civil liability must still be met and once again, the failure to allege any prejudice makes such a claim untenable.

[224] For the same reasons as those raised above, Plaintiffs may however claim punitive damages.

1.3 Conclusions

[225] For all these reasons, the Court concludes that the facts as alleged appears to justify the conclusion that Erika and Zoe Patton, Tasciyan, Nucciarone and DeCicco are entitled to punitive damages as a result of Apple and Samsung's failure to provide instructions necessary for the protection of the user against the risk or danger of thermal effects when the phone is placed at 2 mm from the body and, generally, from the non-thermal effects.

[226] For O'Brien an Arial, the facts alleged do not appear to justify the conclusions sought.

2. Do the class members' claims raise identical, similar or related issues of fact or law (art. 575(1) CCP)?

2.1 Legal principles

[227] Courts must adopt a flexible approach when determining if there is a common interest among the class' members.[114] Just as is the case when analyzing par. 575(2) CCP, the threshold is low.[115] A single common question is sufficient as long as it advances the litigation in a not insignificant manner.[116] In other words, the resolution of the common question must not have an insignificant role in the outcome of the case. A common question may advance the litigation even if many individual questions remain.[117]

2.2 Analysis

[228] On syllogism#1, had the Court recognized that criteria 575(2) CCP was met, it would have only so concluded for the iPhone 7. Plaintiffs' exhibits clearly show that the findings for one phone model cannot be extended to another phone at 5 mm. The class would have been limited to owners of iPhone 7 models. All the more so, the findings for Apple phones could not have been transposed to Samsung phones.

[229] On syllogism #2 and #3, the findings of a potential safety defect are not specific to any models. For reasons already explained, it can be inferred that, irrespective of make or model, all phones' SAR measurements at 2 mm will exceed 1.6W/kg per 1 g of tissue. The same goes for the non-thermal effects of RF exposure. It may well be that the phones have different characteristics or legal disclosures. SAR measurements may well also vary. However, this is not a bar to this criteria being met as the judgment on the merits may make the necessary distinctions. Hence had the Court found that criteria 575(2) CCP was met for one or several Plaintiffs, it would have concluded that the 575(1) CCP criteria was also met.

3. Does the composition of the class make it difficult or impracticable to apply the rules for mandates to take part in judicial proceedings on behalf of others or for consolidation of proceedings 575(3) CCP?

[230] There can be no true contestation of this element save for the question of the issue of attacking RSS-102 as being null and void as the Court has already explained.

---

114 *Vivendi Canada Inc.* v. *Dell'Aniello*, 2014 SCC 1, [2014] 1 S.C.R. 3, par. 54 ["***Vivendi***"], cited in *Asselin*, par. 84.

115 *Vivendi*, par. 72, cited favourably in *Asselin*, par. 84.

116 *Asselin*, par. 85.

117 *Asselin,* par. 87.

4. Are Plaintiffs in a position to properly represent the class members 575(4) CCP?

[231] In order to satisfy this requirement, Plaintiffs must show that the they are i) interested in the suit, ii) that they are competent and iii) that they have no demonstrated conflict of interest with the group members.[118]

[232] A person who has no apparent claim, cannot have the required legal interest. The Court has found that :

232.1. None of the Plaintiffs have alleged an injury or prejudice;

232.2. Claire O'Brien has not demonstrated that she uses a phone manufactured Samsung or Apple;

232.3. Tracey Arial uses "precautionary measures to minimize her exposure, including (...) the use of air tube headphones, using speakerphone mode to avoid holding the phone to her head, and carrying the phone in a shielded radiation-reducing pouch when streaming media; she therefore cannot make a claim for users who allegedly would carry the phone at 2 mm from their body. Furthermore, she appears highly cognisant of RF exposure and is not in the position of the credulous consumer as stated in Time;

[233] Hence, none of the Plaintiffs have the legal interest to institute a claim in damages and Arial and O'Brien have not established their personal interest to claim for punitive damages.

5. The class definition

[234] Given that the claim is based strictly on the *CPA*, a member, in order to be considered to be a consumer, must necessarily have entered into a contract for goods or services as per s. 2 of the *CPA*. Furthermore, necessarily, given that the second paragraph of s. 53 *CPA* benefits the "user", the person must be a "user". For these reasons, it can only extend to natural persons who, in the province of Quebec have leased or purchased and used phones.

[235] As to the class period, Plaintiffs ask that the recourse be instituted from 2013 onward. The procedures were served on Samsung at least on September 11, 2019. The prescription period is three years. Hence, at best, the claim can only extend back to September 11, 2016.

[236] Samsung in its pleading notes asks that a number of particulars be brought dealing with injury, duration of use and manner of use. The Court believes that such restrictions

---

[118] *Oratoire,* par. 32.

are not appropriate as they are dependent on the ultimate findings on the merits. The formulation of the class must not prejudge the litigation.

[237] Hence, the Court will adopt the following class definition:

> *Any physical person residing or domiciled in Quebec, who has, since September 11, 2016, purchased or leased and used an Apple or Samsung cellphone;*

6. The common questions and conclusions

[238] The Plaintiffs propose the following common questions:

> 1. Did Defendants mislead, fail to inform, or fail to warn as concerns the Affected Phones?
>
> 2. What amount of compensatory damages are due to class members for those failures?
>
> 3. Are the Class Representatives and members entitled to equitable disgorgement of all profits made by Defendants on the Affected Phones in the province of Quebec?
>
> 4. Are the designated Representatives and members of the group entitled to have Defendants replace the Affected Phones with equivalent models that when properly tested comply with all relevant norms, do not emit radiation and do not pose a significant health risk?
>
> 5. Are the Class Representatives and members entitled to medical monitoring and if so in what manner?
>
> 6. Do Defendants faults and emissions constitute a "contaminant", "contaminant release", "hazardous material", "energy vector", "plasma", "ray" or "material wave" within the meaning of section 1 of the Environment Quality Act?
>
> 7. Do Defendants faults and omissions constitute a breach of sections 19.1 to 22 of the Environment Quality Act?
>
> 8. Do Defendants faults and omissions constitute intentional breaches of sections 1, 6, 7, 24, 39, 44, 46.1, 48 and 49 of the Charte des droits et libertés de la personne?
>
> 9. What punitive/exemplary damages are due by Defendants to class members for those breaches?
>
> 10. Did the Affected phones sold and marketed in Quebec by Defendants respect regulatory or other norms?

11. Are the Affected Phones sold and marketed by Defendants emitting into the environment emissions or pollutants exceeding prescribed norms?

12. Did Defendants, illicitly and intentionally, falsify their testing results for the Affected Phones?

13. Given the application of Article 1621 (2) C.C.Q., the gravity of Defendants unconscionable behaviour, their disproportionate patrimonial and informational advantage over consumer victim class members, what is the proper amount of punitive damages required to dissuade, denounce and prevent Defendants (and similar companies) future bad conduct?

14. Do Defendants faults and omissions constitute a breach of sections 8, 37, 53, 216, 218, 219, 223.1, 228, 238(a), 253, 272 of the Consumer Protection Act?

15. What compensatory damages are due by Defendants to class members for those breaches?

16. What punitive/exemplary damages are due by Defendants to class members for those breaches?

17. Arial et als. CPA Conclusions restated:

a) Did Apple and Samsung contravene their duty to inform consumers of the SAR levels and related health risks in the phones they manufactured and sold from 2013 onwards?

b) In the absence of such information, did Apple and Samsung contravene sections 37 et 38 CPA as concerns the SAR levels and related health risks in the phones they manufactured and sold from 2013 to today?

c) Did Apple and Samsung fail in their duty to inform Quebec consumers with their representations as concerns the SAR levels and related health risks in the phones they manufactured and sold from 2013 in violation of sections 37, 53, 216, 218, 219, 223.1, 238 (a), 253 and/or 228 CPA?

d) Without that adequate information concerning the SAR levels and related health risks in the phones they manufactured and sold from 2013 to today are Quebec consumers entitled to the recourse stipulated at section 272 CPA and if so which ones?

e) Should Apple and Samsung, pay compensatory and or punitive damages to class members and in what amount ?

18. Are the designated Representatives and members of the group entitled to have Defendants issue a software patch that would reduce the EMF/radiation emission on the Affected Phones and if so, what should be the content of that software patch?

19. Are the designated Representatives and members of the group entitled to have Defendants reimburse all sums spent in the present proceedings including Expert fees and disbursements?

20. To what amount of compensatory damages is each member of the group entitled?

21. Are the designated Representatives and members of the group entitled to have Defendants publicize Non-Ionizing Radiation Protection EMF hazard warning signs for wireless users of Affected mobile phones and what should be the content and location of those warnings?

[239] Most of these questions are inappropriate and they are not presented in a logical order. Hence, the Court will recast them as follows:

1. Do the defendants phones cause the SAR level to exceed 1.6W/kg on 1 g of tissue and if yes, at what separation distance?
2. Does this pose a risk or a danger to the user?
3. Can RF exposure, regardless of separation distance, cause adverse health effects thereby constituting a risk or danger?
4. Should Apple and Samsung have provided instructions to protect users against such risks or danger, thereby triggering their liability under s. 53 *CPA*?
5. Is this an important fact which Apple and Samsung failed to mention to users, in violation of s. 228 CPA?
6. Should Apple or Samsung pay punitive damages?

[240] As already explained, the conclusions sought are inappropriate in the very large part. The Court will therefore recast the conclusions as appears further down.

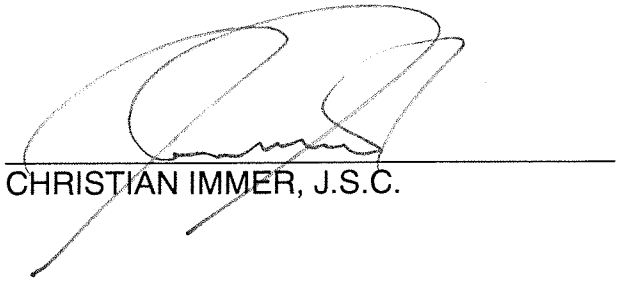
FOR THESE REASONS, THE COURT:

[241] **GRANTS** in part the *Re-re-Amended Motion for Authorization to Institute a Collective Action and to Obtain the Status of Representative* dated April 1, 2022	**ACCORDE** en partie la *Re-re-Amended Motion for Authorization to Institute a Collective Action and to Obtain the Status of Representative* datée du 1er avril 2022;
[242] **AUTHORIZES** the bringing of a class action in the form of an originating application in damages against Apple Canada Inc., Apple Inc., Samsung Electronics Canada et Samsung Electronics Co. Ltd.	**AUTORISE** l'introduction d'une action collective sous la forme d'une demande introductive d'instance en dommages-intérêts contre Apple Canada Inc., Apple Inc., Samsung Electronics Canada et Samsung Electronics Co. Ltd.

[243] **APPOINTS** the Applicants Erika Patton, Zoe Patton, Alex Tasciyan, Mathew Nucciarone and Vito DeCicco as representatives of the persons included in the following class the ("Class"): Any physical person residing or domiciled in Quebec, who has, since September 11, 2016, purchased or leased and used an Apple or Samsung cellphone;	**ATTRIBUE** à Erika Patton, Zoe Patton, Alex Tasciyan, Mathew Nucciarone et Vito DeCicco le statut de représentants des personnes comprises dans le groupe ci-après décrit (le « Groupe »): Toute personne physique résidante ou domiciliée au Québec, qui a, depuis le 11 septembre 2016, acheté ou loué et utilisé un téléphone Apple ou Samsung;
[244] **IDENTIFIES** the principal questions of fact and law to be treated collectively as the following: 1. Do the defendants phones cause the SAR level to exceed 1.6W/kg on 1 g of tissue and if yes, at what separation distance? 2. Does this pose a risk or a danger to the user? 3. Can RF exposure, regardless of separation distance, cause adverse health effects thereby constituting a risk or danger to the user? 4. Should Apple and Samsung have provided instructions to protect users against such risk or danger, thereby triggering their liability under s. 53 *CPA*? 5. Is this an important fact which Apple and Samsung failed to mention to users, in violation of s. 228 CPA? 6. Should Apple or Samsung pay punitive damages?	**IDENTIFIE** les questions principales de faits et de droit à être traitées collectivement comme suit : 1. Les niveaux de SAR des téléphones des défendeurs dépassent-elles la limite de 1,6W/kg par 1 gr de tissu et, le cas échéant, à quelle distance de séparation? 2. Cela pose-t-il un risque ou un danger à l'utilisateur? 3. L'exposition aux FR, sans égard à la distance de séparation, a-t-elle des effets sur la santé, constituant ainsi un risque ou un danger à l'usager? 4. Apple et Samsung auraient-elle dû fournir des instructions à l'usager pour se protéger contre un tel risque ou danger, entrainant leur responsabilité en vertu de l'article 53 *LPC*? 5. Est-ce un fait important qu'elle a passé sous silence, le tout en violation de l'article 228 *LPC*? 6. Apple et Samsung doivent-elle verser des dommages punitifs?

[245] **IDENTIFIES** the conclusions sought by the class action to be instituted as being the following: **DECLARE** that Defendants have contravened section 53 of the Consumer Protection Act; **DECLARE** that Defendants have contravened section 228 of the Consumer Protection Act; **CONDEMN** Defendants to pay punitive damages to Plaintiffs in an amount to be determined by the Court; **ORDER** the collective recovery of the punitive damages; **THE WHOLE** with judicial costs including expert fees.	**IDENTIFIE** les conclusions recherchées par l'action collective à intenter comme étant les suivantes : **DÉCLARE** que les défendeurs ont contrevenu à l'article 53 de la *Loi sur la protection du consommateur*; **DÉCLARE** que les défendeurs ont contrevenu à l'article 228 de la *Loi sur la protection du consommateur*; **CONDAMNE** les défendeurs à verser des dommages punitifs aux demandeurs pour un montant à être déterminé; **ORDONNE** le recouvrement collectif des dommages punitifs; **LE TOUT** avec les frais de justice, incluant les frais d'expert.
[246] **DECLARES** that all members of the Class that have not requested their exclusion, be bound by any judgement to be rendered on the class action to be instituted in the manner provided for by the law;	**DÉCLARE** que tous les membres du groupe qui n'ont pas demandé leur exclusion son liés par tout jugement à rendre sur l'action collective à intenter de la manière prévue par la loi;
[247] **CONVENES** the parties to a further hearing to hear representations on the request for information, the content of the notices required under art. 579 of the Code of Civil procedure, the appropriate communication or publication of the said notice and the appropriate delay for a class member to request exclusion, such hearing to take place within 45 days of the present judgment, on a date to be determined between the parties and the Court;	**CONVOQUE** les parties à une audience afin d'entendre leurs représentations quant aux demandes de documents, le contenu de l'avis requis en vertu de l'article 579 du Code de procédure civile, la communication ou la publication appropriée dudit avis et le délai approprié pour qu'un membre demande l'exclusion, une telle audience doit avoir lieu dans les 45 jours du présent jugement, à une date à être déterminée entre les parties et le Tribunal;

[248] **THE WHOLE** with costs, but no expert costs but with including publication fees.	**AVEC FRAIS** de justice, mais pas de frais d'expert, mais incluant les frais de publication.



CHRISTIAN IMMER, J.S.C.

Me Charles O'Brien
LORAX LITIGATION
Attorney for Plaintiffs

Me Kristian Brabander
Me Catherine Martin
Me Amanda Gravel
Me Kevin Pinkoski
McCARTHY TÉTRAULT
Attorneys for Defendants Apple Canada Inc. and Apple Inc.

Me Karine Chênevert
Me Stéphane Pitre
Me Jean St-Onge
Me Justine Kochenburger
BORDEN LADNER GERVAIS
Attorneys for Defendants Samsung Electronics Canada and Samsung Electronics Co. Ltd.

Hearing dates: March 31 and April 1, 2022