mcmillan

2017 ROUND-UP: PATENT APPLICATIONS RELATED TO DATA PROCESSING AT CIPO

Posted on January 12, 2018

Categories: Insights, Publications

The patentability of computer-implemented inventions, particularly with regard to patentable subject matter, continues to be a topic of interest in Canada among industry players and patent practitioners. From the perspective of Canadian Patent Examiners and the Patent Appeal Board ("PAB"), the test for determining whether a computer-implemented invention is of patentable subject matter is set out in the 2013 patent practice notice entitled "Practice Guidance Following the Amazon FCA Decision" ("Practice Notice"). The Practice Notice was issued in response to the 2011 Federal Court of Appeal decision in Canada (Attorney General) v Amazon.com Inc, 2011 FCA 328 ("Amazon").

The test as outlined in the Practice Notice comprises the steps of identifying: (i) the skilled person in the art; (ii) the common general knowledge in the art; (iii) the problem faced by the inventors; (iv) the proposed solution to solving the problem faced by the inventors; and (v) the elements in the solution. [1] Per the PAB, essential elements can be identified as those required to achieve the disclosed solution as claimed. [2] Per the PAB, computer-implemented inventions are generally of patentable subject matter if the problem and the solution reside in equipment or infrastructure, and not simply rules or procedures. [3],[4]

In 2017, the Canadian Intellectual Property Office ("CIPO") granted over 2600 patents for computer related inventions. Of those granted patents, about 600 were for inventions related to data processing systems and methods classified under International Patent Classification code G06Q5 ("G06Q inventions"). According to CIPO statistics, the number of patents granted for G06Q [5] inventions has generally increased year-over-year since the Amazon decision. Such increase is summarized in the graph below: [6], [7]

At the same time, the PAB continues, on a yearly basis, to review a handful of Examiner's decisions that have rejected patent applications related to G06Q inventions on the grounds of non-patentable subject matter. Below is a table that summarizes the PAB's treatment of G06Q inventions between 2011 and 2017, with respect to subject matter eligibility: [8]

Year	# of G06Q inventions before PAB	# of G06Q inventions before PAB (re: patentable subject matter)	# of G06Q inventions before PAB (re: patentable subject matter) Yes[9]	# of G06Q inventions before PAB (re: patentable subject matter) No[10]
2011	0	0	-	-
2012	2	0	-	-
2013	6	5	3	2
2014	2	1	0	1
2015	3	0	-	-
2016	8	5	0	5
2017	10	6	0	6

Ten PAB decisions related to G06Q inventions were rendered in 2017; six of those decisions were related to whether the impugned G06Q inventions were of patentable subject matter. In all six of those decisions, the impugned G06Q inventions were deemed to be of non-patentable subject matter. Short summaries of these six PAB decisions are provided as follows:

1. Re: CA2624223, Commissioner's Decision #1417 – February 24, 2017.

The application was related to securities and commodities pricing, and pertained to methods for determining more accurate and consistent prices for a security throughout the trading day, based on pricing information obtained from different sources and from other similar securities. Claims were directed to a computer-readable medium having instructions thereon for execution by a computer to carry out a method for pricing securities and commodities. Although the claims recited conventional computer components, the PAB found that such components merely described the working environment in which the invention operated, and merely performed calculations set out in the claim language in a manner in which the components were conventionally designed to do. The PAB found that the essential elements of the claims did not relate to patentable subject matter. The application was refused.

2. Re: CA2223791, Commissioner's Decision #1422 – June 01, 2017.

The application was related to methods and systems for opening a single, integrated account that allowed customers to access a full range of global financial services using a variety of access points. Claims were directed to a method and system for opening a single integrated account for a customer in a single session. While the PAB agreed that computer components were, practically speaking, used to implement the invention, they nevertheless were not elements that were material to the solutions to the problems set out in the application. The PAB found that the essential elements of the claims did not relate to patentable subject

matter. The application was refused.

3. Re: CA2767500, Commissioner's Decision #1425 – August 07, 2017.

The application was related to the incrementally phased activation of a general-purpose reloadable ("GPR") card. The claims were directed to: (i) collecting identification information for activation approval; (ii) loading monetary value to an account associated with the GPR card; (iii) communicating initial activation to a user; wherein initial activation of the GPR card is the first phase in a multiple-phase activation. The PAB found that the subject matter of the claims did "not manifest a discernible effect or change of character or condition in a physical object", but rather merely involved "the carrying out of a plan or theory of action without the production of any physical results proceeding directly from the operation of the theory or plan itself". The PAB found that the essential elements of the claims did not relate to patentable subject-matter. The application was refused.

4. Re: CA2440173, Commissioner's Decision #1431 – November 02, 2017.

The application was related to a tool and methodology for telecommunications service providers to determine comprehensively the cost of alternative networking technologies and architectures. The claims were directed to a method and computer program product comprising instructions for performing certain tasks including, but not limited to, receiving data and options for management processes, selecting network management processes, determining suppliers' management processes costs, and validating and calibrating data. The PAB found that, while "physical elements may have ensued from implementing a network management plan generated by the tool or its methodology, the essential elements themselves did not encompass physical elements or results". The PAB found the essential elements of the claims to relate to a mental operation, and therefore not to patentable subject matter. The application was refused.

5. Re: CA2457533, Commissioner's Decision #1432 – November 20, 2017.

The application was related to the scheduling of reoccurring deliveries or pickups, and specifically a user's ability to schedule a series of deliveries or pickups in a single request. While the preamble of the claims recited computer components and systems, the essential elements of the claims, as purposively construed, were related to rules and procedures for scheduling a series of delivery vehicle visits, and therefore did not relate to patentable subject matter. The application was refused.

6. Re: CA2392494, Commissioner's Decision #1434 – November 29, 2017.

The application was related to package delivery services, and particularly notifying a customer of available higher level services when the customer selected a service for package delivery. The PAB found that the application proposed to solve the problem of helping customers to make a more informed decision by

notifying them of the availability of higher levels of delivery service, but not to solve a problem of, for example, automatically computing data or of communicating information from one device to another in real time. The PAB found that the physical elements recited in the claims may form a part of the working environment, but did not form a part of the essential elements of the claimed invention itself. The application was refused.
A side-by-side comparison of the "problem" faced by the inventors against the "proposed solution" to solving the "problem", as identified by the PAB in the six foregoing PAB decisions, is provided in the following table:

Decision Number	Problem	Solution
1417	A need for systems and methods for efficiently providing improved accuracy and consistency of pricing information given to clients, and for obtaining accurate pricing data in light of various data sources (¶20)	The use of certain combinations of different pricing sources and rules to determine the best price to provide a user of a trading system (¶21)
1422	When cross-selling new accounts, the customer must repeatedly provide the bank with the same data. Customers are unlikely to change their accounts due to the effort involved (¶31)	Enabling the opening of a single integrated account for a customer in a single session (¶35) In addition, and with respect to claims 1 and 21, presenting the user a first image of a bank statement, and a second image of a bank statement which is revised to reflect the customer's selection (¶35)
1425	An inability to activate prior art GPR cards until fulfilment of specific legal requirements (¶30)	Offering of a single GPR card for which functions can be incrementally added in phases (¶35)
1431	A need to assess business solutions comprising alternative management processes for managing network architectures for a tele-communications network (¶26)	A planning and costing method to assess business solutions comprising alternative management processes for managing network architectures for a telecommunications network (¶26)

1432	An inability of customers to schedule periodic deliveries in a single request (as opposed to scheduling each delivery individually) within a delivery scheduling system for scheduling deliveries in realtime over the Internet (¶18)	Improving the delivery scheduling system that allows a user to schedule multiple deliveries from a single request (¶21), but modifying the rules or procedure a customer would follow to schedule multiple delivery vehicle visits (¶30, ¶31)
1434	Difficulty for a customer to make an informed selection of a delivery service, given the vast array of available service levels and the variability in their price differences depending on the circumstances of the delivery (¶23)	When a customer asks for information about delivery of a package at a certain level of service, information about delivery at a higher level of service (when available) is provided in addition to the requested information (¶26)

Notwithstanding a brief lull over the period between 2014-2015, the past couple of years have seen a resurgence in the number of rejected patent applications related to G06Q inventions that are appealed before the PAB. Such data suggest that the disagreement between patent practitioners and the Canadian patent office as to the circumstances under which G06Q inventions should be considered of patentable subject matter appears to be very much alive. Despite such persisting disagreement, it is likely that the guidance set out in the Practice Notice will continue to be applied at the examination and PAB stage until such guidance is successfully appealed at the Federal Court or beyond.

Take-Home

From the PAB decisions summarized above, one may glean the following:

If the problem and solution described in the specification resides in equipment or infrastructure, then the computer-implemented invention is generally of patentable subject matter.

Rules and procedures are generally not of patentable subject matter.

The number of PAB decisions rendered on the topic of G06Q inventions in 2017, which was the most since the Amazon decision in 2011, suggests that there is still disagreement between patent applicants, patent practitioners, and CIPO as to the circumstances under which G06Q inventions should be considered of patentable subject matter.

Arguments that contend that the analysis outlined in the Practice Notice does not accord with Canadian law

may not be persuasive at the examination level or PAB level. Nevertheless, it may be important to include such arguments – particularly if there is an intention to appeal a PAB decision.

In any event, industry players and patent practitioners are certainly advised to not ignore the problem/solution approach outlined in the Practice Notice and adopted at the examination level and PAB level, particularly if the court appeals process is not a viable option.[11]

by Pablo Tseng

For more information on this topic, please contact:

Vancouver Pablo Tseng 778.328.1631 pablo.tseng@mcmillan.ca

A Cautionary Note

The foregoing provides only an overview and does not constitute legal advice. Readers are cautioned against making any decisions based on this material alone. Rather, specific legal advice should be obtained.

[1] See, for example, the analysis adopted in Commissioner's Decision #1434.[ps2id id='1' target=''/]
[2] Commissioner's Decision #1432.[ps2id id='2' target=''/]
[3] Ibid.[ps2id id='3' target=''/]
[4] Commissioner's Decision #1434.[ps2id id='4' target=''/]
[5] The “G06Q” classification is assigned to inventions related to “data processing systems or methods, specifically adapted for administrative, commercial, financial, managerial, supervisory or forecasting purposes; systems or methods specifically adapted for administrative, commercial, financial, managerial, supervisory or forecasting purposes, not otherwise provided for”[ps2id id='5' target=''/]
[6] Data retrieved from CIPO Patent Database by inputting “G06Q” in the “IPC Field”, and selecting the appropriate searched time periods.[ps2id id='6' target=''/]
[7] Please note that the statistics for patent applications filed at CIPO in 2016 and 2017 are incomplete, owing to at least the 18 month confidentiality period post-filing.[ps2id id='7' target=''/]
[8] Decisions of the Commissioner of Patents, searched between 2011-01-01 and 2017-12-31 and under IPC code “G06Q”.[ps2id id='8' target=''/]
[9] Yes, the G06Q invention is of patentable subject matter.[ps2id id='9' target=''/]
[10] No, the G06Q invention is of non-patentable subject matter.[ps2id id='10' target=''/]
[11] At the time of this publication, four of the six identified PAB decisions are still eligible for appeal under Section 41 of the Patent Act, RSC, 1985, c P-4.[ps2id id='11' target=''/]