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

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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, <u>2011 FCA 328</u> ("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 <u>2600 patents</u> for computer related inventions. Of those granted patents, about <u>600</u> 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]

		# of G06Q inventions	# of G06Q inventions	# of G06Q inventions
Veer	# of G06Q inventions	before PAB (re:	before PAB (re:	before PAB (re:
Year	before PAB	patentable subject	patentable subject	patentable subject
		matter)	matter) Yes <mark>[9]</mark>	matter) No <mark>[10]</mark>
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
	A need for systems and methods for efficiently	The use of certain combinations of
	providing improved accuracy and consistency	different pricing sources and rules
<u>1417</u>	of pricing information given to clients, and for	to determine the best price to
	obtaining accurate pricing data in light of	provide a user of a trading system
	various data sources (¶20)	(¶21)
		Enabling the opening of a single
		integrated account for a customer
	When cross-selling new accounts, the	in a single session (¶35) In addition,
	customer must repeatedly provide the bank	and with respect to claims 1 and 21,
<u>1422</u>	with the same data. Customers are unlikely to	presenting the user a first image of
	change their accounts due to the effort	a bank statement, and a second
	involved (¶31)	image of a bank statement which is
		revised to reflect the customer's
		selection (¶35)
	An inability to activate prior art GPR cards	Offering of a single GPR card for
<u>1425</u>	until fulfilment of specific legal requirements	which functions can be
	(¶30)	incrementally added in phases (¶35)
		A planning and costing method to
	A need to assess business solutions	assess business solutions
	comprising alternative management	comprising alternative
<u>1431</u>	processes for managing network	management processes for
	architectures for a tele-communications	managing network architectures for
	network (¶26)	a telecommunications network
		(¶26)

		Improving the delivery scheduling
	An inability of customers to schedule periodic	system that allows a user to
	deliveries in a single request (as opposed to	schedule multiple deliveries from a
<u>1432</u>	scheduling each delivery individually) within a	single request (¶21), but modifying
	delivery scheduling system for scheduling	the rules or procedure a customer
	deliveries in realtime over the Internet (¶18)	would follow to schedule multiple
		delivery vehicle visits (¶30, ¶31)
		When a customer asks for
	Difficulty for a customer to make an informed	information about delivery of a
	selection of a delivery service, given the vast	package at a certain level of service,
<u>1434</u>	array of available service levels and the	information about delivery at a
	variability in their price differences depending	higher level of service (when
	on the circumstances of the delivery ($ m \P23$)	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]

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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 <u>Commissioner's Decision #1434</u>.

- [2] <u>Commissioner's Decision #1432.</u>
- [3] Ibid.

[4] Commissioner's <u>Decision #1434</u>.

[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"

[6] Data retrieved from CIPO Patent Database by inputting "G06Q" in the "IPC Field", and selecting the appropriate searched time periods.

[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.

[8] <u>Decisions of the Commissioner of Patents</u>, searched between 2011-01-01 and 2017-12-31 and under IPC code "G06Q".

[9] Yes, the G06Q invention is of patentable subject matter.

[10] No, the G06Q invention is of non-patentable subject matter.

[11] At the time of this publication, four of the six identified PAB decisions are still eligible for appeal under Section 41 of the <u>Patent Act</u>, RSC, 1985, c P-4.

