Report on FY2021 Annual User Satisfaction Survey on Patent Examination Quality

October 2021

Japan Patent Office

Summary

1. Survey method and response rate

The FY2021 Survey was conducted online on the overall quality of patent examination on national applications (Sheet 1) and the overall quality of the international search and international preliminary examination on PCT applications (Sheet 2) (Submission period: May to June, 2021).

Table 1 shows year-on-year trends in response rates¹.

	FY2021 (Responded/ Sent)	FY2020	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012
Sheet 1	87.3% (571/654)	87.0%	88.0%	90.0%	90.6%	89.3%	85.5%	86.8%	91.8%	91.4%
Sheet 2	88.4% (343/388)	85.1%	90.5%	93.5%	92.3%	91.2%	87.4%	88.7%	90.6%	91.8%

Table 1: Response rate of Questionnaire Sheets

2. Satisfaction level with overall quality of patent examination on national applications (Sheet 1)

Respondents at the rate of 95.1% (97.3% in the previous year) evaluated the level of satisfaction with the overall quality of patent examination on national applications (overall satisfaction level) as *neutral* or higher, with positive responses² of 63.0% (64.3% in the previous year) (Figure 1).

In terms of individual items, 95.3% of the respondents evaluated the level of satisfaction with "communication with examiners in face-to-face interviews and telephone conversations" as *neutral* or higher (97.0% in the previous year) with positive responses of 66.8% (71.0% in the previous year), higher than our objective of 60% or higher set in FY2020 (Figure 2).

The proportions of the respondents who evaluated "consistency of judgements among examiners" and "application of Article 29 (2): inventive step" as *neutral* or higher were 84.6% and 87.7%, respectively (86.2% and 88.3% in the previous year), and the proportions of positive responses were 39.3% and 48.4%, respectively (35.2% and 47.0% in the previous year) (Figures 3 and 4). These items are treated as priorities³, according to

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¹ Questionnaire Sheets A and C used in the previous Surveys were replaced with Sheets 1 and 2 in FY2020 Survey. In Table 3, the response rates of Sheets 1 and 2 in and before FY2019 indicate those in Sheets A and C.

² The sum of "Satisfied" and "Somewhat satisfied"

³ Items to be addressed on a priority basis

the Survey results in the previous fiscal year.

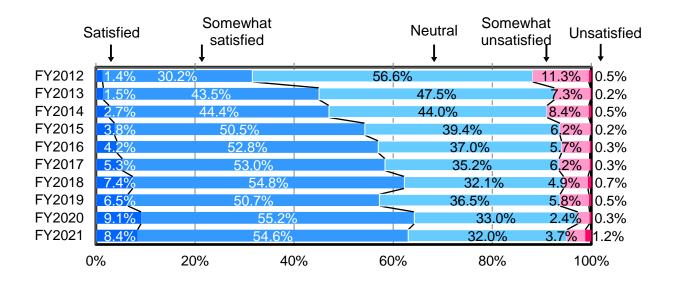


Figure 1: Satisfaction level with overall quality of patent examination on national applications (overall satisfaction level)

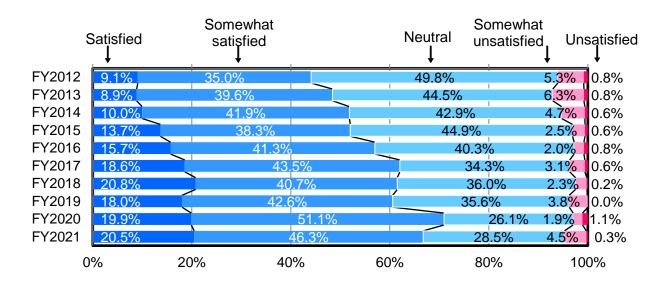


Figure 2: Satisfaction level with communication with examiners in face-to-face interviews and telephone conversations

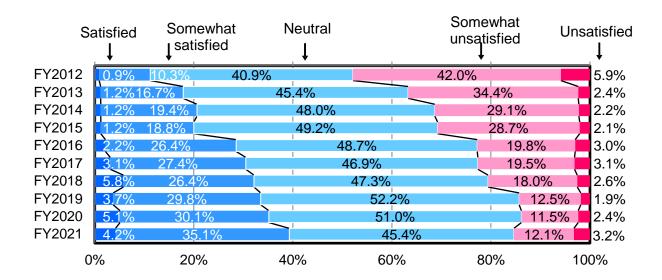


Figure 3: Satisfaction level with consistency of judgements among examiners

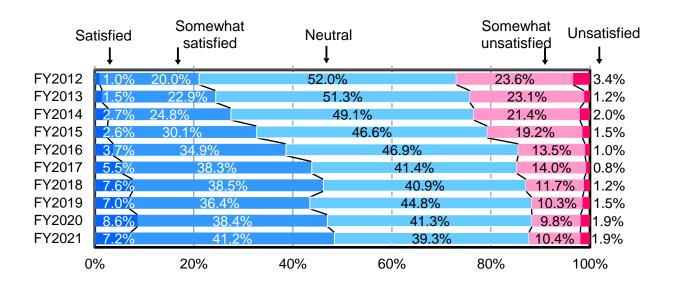


Figure 4: Satisfaction level with application of Article 29 (2): inventive step

3. Satisfaction level of overall quality of the international search and international preliminary examination on PCT applications (Sheet 2)

Respondents at the rate of 97.4% (97.2% in the previous year) evaluated the level of satisfaction with the overall quality of the international search and international preliminary examination on PCT applications (overall satisfaction level) as *neutral* or higher, with positive responses⁴ of 62.7% (59.2% in the previous year) (Figure 5).

In terms of individual items, "consistency of judgements in the international phase" and "judgement on novelty/inventive step" received *neutral* or higher responses of 92.0% and 92.1%, respectively (91.8% and 91.2% in the previous year), and the proportions of

⁴ The sum of "Satisfied" and "Somewhat satisfied"

positive responses were 47.9% and 55.7%, respectively (46.1% and 52.8% in the previous year) (Figures 6 and 7). These items are treated as priorities⁵, according to the Survey results in the previous fiscal year.

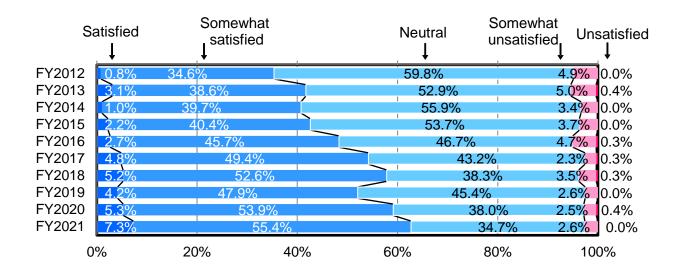


Figure 5: Satisfaction level with overall quality of the international search and international preliminary examination (overall satisfaction level)

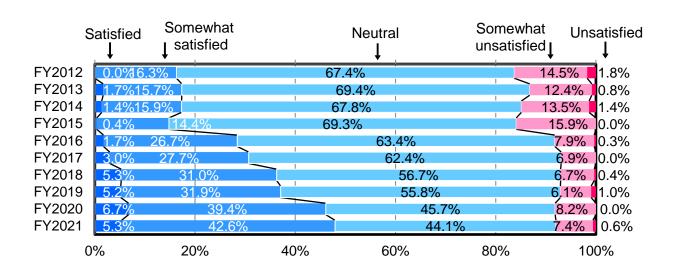


Figure 6: Satisfaction level with consistency of judgements in the international phase

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⁵ Items to be addressed on a priority basis

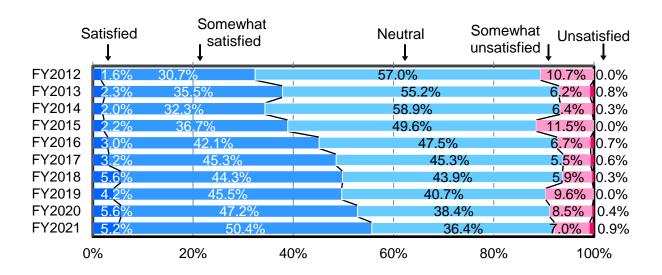


Figure 7: Satisfaction level with judgement on novelty/inventive step

4. Comparison with other national/regional Offices

Table 2 shows the aggregated results of a multiple-choice question as to what Office outperforms or is more desirable to perform than the other Offices in patent examination.

Table 2: Offices which the respondents think are superior or preferable for each evaluation item⁶

Evaluation Item	JPO	USPTO	EPO	CNIPA	KIPO
Thorough and easy-to-understand	212	69	86	53	53
description in notifications of reasons for	(65.4%)	(21.3%)		(16.4%)	(16.4%)
refusal	(00:170)	(21.070)	(20.070)	(10.170)	(10.170)
Judgement on industrial applicability and	105	32	45	24	24
patent eligibility	(32.4%)	(9.9%)	(13.9%)	(7.4%)	(7.4%)
Judgement on novelty/inventive step	180	46	113	35	29
Judgement on noverty/inventive step	(55.6%)	(14.2%)	(34.9%)	(10.8%)	(9.0%)
ludgement on descriptive requirements	128	47	52	24	23
Judgement on descriptive requirements	(39.5%)	(14.5%)	(16.0%)	(7.4%)	(7.1%)
Consistency of judgements among	163	19	91	16	21
examiners	(50.3%)	(5.9%)	(28.1%)	(4.9%)	(6.5%)
Duisa and assaults a	147	48	147	54	25
Prior art searches	(45.4%)	(14.8%)	(45.4%)	(16.7%)	(7.7%)
Level of examiners' expertise in technical	185	23	89	24	23
details	(57.1%)	(7.1%)	(27.5%)	(7.4%)	(7.1%)
Daniel de la constitución de la	176	47	71	30	25
Responses to written opinions	(54.3%)	(14.5%)	(21.9%)	(9.3%)	(7.7%)
Communication with examiners in face-to-	106	60	14	6	5
face interviews	(32.7%)	(18.5%)	(4.3%)	(1.9%)	(1.5%)
Communication with examiners in	99	69	9	15	6
telephone conversations	(30.6%)	(21.3%)	(2.8%)	(4.6%)	(1.9%)
Scope of patent that was granted after	143	57	61	22	26
examination	(44.1%)	(17.6%)	(18.8%)	(6.8%)	(8.0%)

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⁶ Excluding responses "No examination experience at the Office/Not sure." Percentages in brackets represent the ratio of valid responses (excluding Not sure / No experience or response).

5. Result Analysis

(1) Correlation between the levels of satisfaction with each evaluation item and the overall quality of patent examination on national applications

Correlation coefficients can be used to measure relationships between the levels of satisfaction with each evaluation item and with the overall quality of patent examination.

Figure 8 shows correlation between the average levels of satisfaction⁷ with each of 18 evaluation items and the overall quality of patent examination on national applications, with the former on the x-axis and the latter on the y-axis. The JPO should improve on a priority basis evaluation items which received low levels of satisfaction (left side) in spite of high correlation coefficients with the overall level of satisfaction (upper side). This year's Survey reveals that evaluation items "consistency of judgements among examiners" and "consistency of judgements among examiners on Article 29 (2): inventive step" are the priorities⁸.

(2) Correlation between the levels of satisfaction with each evaluation item and the overall quality of the international search and international preliminary examination on PCT applications

Figure 9 shows correlation between the average levels of satisfaction⁷ with each of 10 evaluation items and the overall quality of the international search and international preliminary examination on PCT applications, with the former on the x-axis and the latter on the y-axis. This year's Survey reveals, as in (1) above, that "consistency of judgements in the international phase" is a priority⁸.

⁷ Average levels of satisfaction indicated in a 5-point scale, in which 5 indicates satisfied, 4 - somewhat satisfied, 3 - neutral, 2 - somewhat unsatisfied, and 1 - unsatisfied.

⁸ Items to be addressed on a priority basis

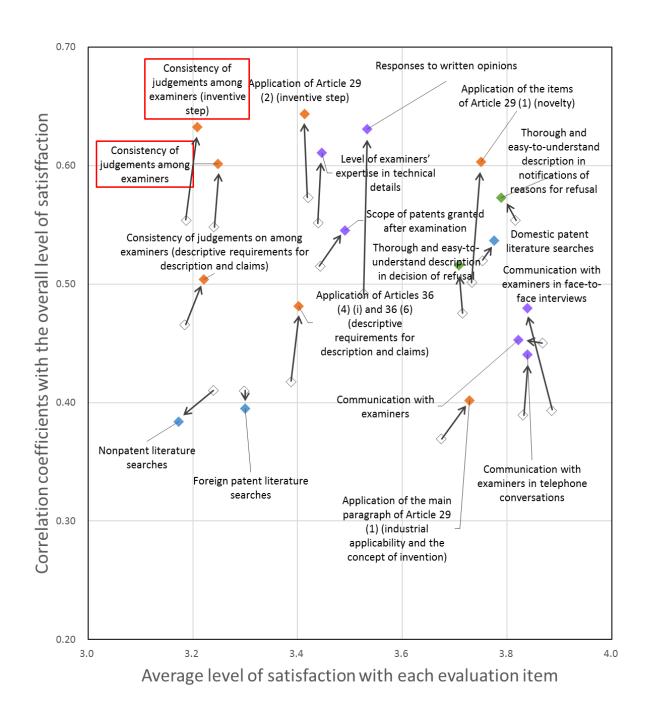


Figure 8: Average level of satisfaction for each evaluation item and correlation coefficients with overall satisfaction level (national applications) 9

⁹ Plots are colored according to evaluation types: Light blue for prior art searches; orange for judgements; green for descriptions in notifications; purple for others. White plots representing Survey results and arrows representing changes in correlation coefficients are from the previous year's Survey.

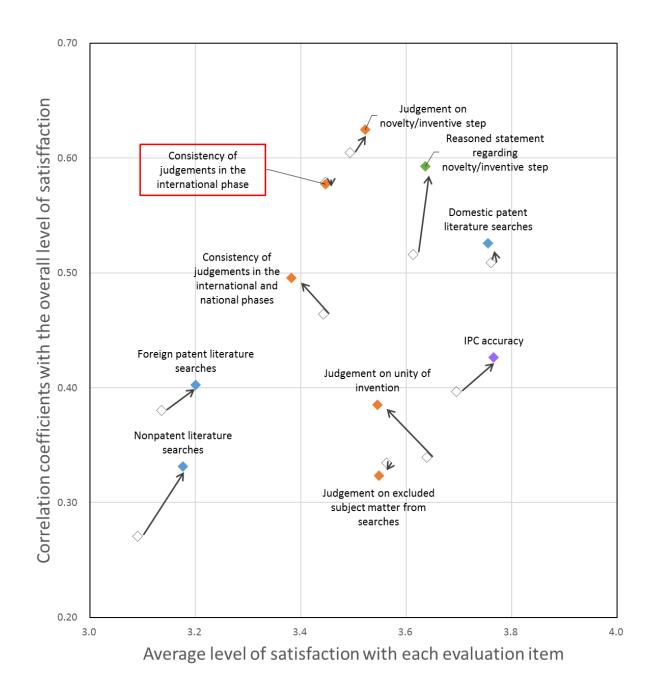


Figure 9: Average level of satisfaction for each evaluation item and correlation coefficients with overall satisfaction level (PCT applications)⁹

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1. Overview

(1)Background

Globally reliable, high-quality examination and proper patent grant by the Japan Patent Office (JPO) are keys for supporting domestic enterprises in developing global business activities smoothly, driving innovation, and maintaining sound business practices. Based on this premise, the JPO released its Quality Policy on Patent Examination (hereafter "Quality Policy") in 2014, which outlines fundamental principles of its quality management policies designed to achieve the utmost examination quality in the world. The Quality Policy declares, under one of its six fundamental principles: "We meet wide-ranging needs and expectations," that the JPO understands and respects broad-ranging needs of and expectations for patent examination so that it may contribute to the benefit of Japanese society and the satisfaction of people connected with the patent system.

Carefully listening to the opinions of users is essential to continuously formulate measures for achieving quality assurance in patent examination. The JPO has conducted its User Satisfaction Survey (hereafter "Survey") annually since FY2012 and has reflected feedback from users in its quality management initiatives.

This report shows a summary of the Survey results and detailed analyses of responses as follows.

(2) Objective

This Survey aims to collect users' opinions on and identify the current quality of the JPO's patent examination and works as a means for the JPO to improve its practices in the future.

In other words, this Survey corresponds to the "Check" phase of the PDCA (Plan, Do, Check, Act) cycle outlined in the Quality Management Manual for Patent Examination since it evaluates patent examination procedures. The Survey results will be used to continuously improve the patent examination practices based on one of the principles of the Quality Policy: "We continually improve operations."

(3) Method

This Survey was conducted using two types of online questionnaires (see Appendix):

¹ In this Report, the term "patent examination" means examination on inventions, including International Search and International Preliminary Examination under the PCT, and establishment of Reports of Utility Model Technical Opinion, as defined in the Quality Policy. Any reference to "patent examination" in the context of national applications means examination on inventions in national applications.

Sheet 1 asks respondents how they would evaluate the overall quality of patent examination on national applications in FY2020 and Sheet 2 asks them how they would evaluate the overall quality of the international search and international preliminary examination on PCT applications in FY2020. In the questionnaire sheets, a 5-point scale is used to indicate the level of satisfaction with multiple evaluation items (satisfied, somewhat satisfied, neutral, somewhat unsatisfied, and unsatisfied).

Respondents received an individual password to access the online Questionnaire Sheets by e-mail and were asked to answer the questions anonymously or otherwise (Submission period: May to June, 2021).

Tables 1 and 2 show how applicants were selected and how many were selected for each questionnaire sheet. It should be noted that respondents to Sheets 1 and 2 overlap to some degree. The number of respondents is 737, excluding the overlap.

Table 1: Method of selecting and number of applicants for Sheet 1

	Method of selecting applicants	No. of applicants	Total
	Non-individual, <u>domestic residents</u> , who filed 50 or more national applications as a lead applicant in FY2019, obtained one or more final decisions for published applications in FY2020	542	
Sheet 1 (Overall quality of patent examination on	Non-individual, <u>foreign residents</u> , who filed 50 or more national applications as a lead applicant in FY2019, obtained one or more final decisions for published applications in FY2020	42	654
national applications)	Small-scale applicants ² who filed less than 50 national applications as a lead applicant in FY2019	20	
	Top 50 <u>patent attorneys</u> who filed the most applications in FY2019	50	

Table 2: Method of selecting and number of applicants for Sheet 2

	Method of selecting applicants	No. of applicants	Total
Sheet 2 (Overall quality of the	Non-individual, <u>domestic residents</u> , who filed 18 or more PCT applications as a lead applicant in FY2019	338	
international search and	Small-scale applicants ² who filed less than 18 PCT applications as a lead applicant in FY2019	20	388
preliminary examination on PCT applications)	Top 30 patent attorneys who filed the most PCT applications in FY2019	30	

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² Small-scale applicants were selected from manufacturers with capital of not more than 300 million yen or less than 300 employees; and which previously had interviews or discussions with the JPO.

(4) Response rate and breakdown of respondents by industry sector

Table 3 shows year-on-year trends in response rates³ and Table 4 is a breakdown of respondents by industry sector. Anonymous responses account for 42.7% of all responses to sheet 1 and 42.3% of all the responses to sheet 2 (43.1% and 42.8% respectively in the previous Survey). The number of respondents is 640, excluding those overlapping in sheets 1 and 2.

Table 3: Response rate of Questionnaire Sheets

	FY2021		-> / / -	->	-> / / -				-> (0.0.10	-> (00 (0
	(Responded/	FY2020	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012
	Sent)									
Sheet	87.3%	87.0%	99 A9/	00 00/	00 60/	90.30/	85.5%	QG Q0/	01 90/	01 /0/
1	(571/654)	67.076	00.0%	90.076	90.076	09.576	05.576	00.076	91.076	91.470
Sheet	88.4%	85.1%	90.5%	02 50/	02.20/	04.20/	87.4%	00 70/	00 60/	01 00/
2	(343/388)	65.1%	90.5%	93.5%	92.3%	91.2%	07.4%	00.7%	90.6%	91.0%

Table 4: Breakdown of respondents by industry sector

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	She	et 1	Sheet 2		
Attribute (Sector) ⁴		Responses	Percentage	Responses	Percentage	
	Metal	22	3.9%	11	3.2%	
လွှ	Construction	11	1.9%	3	0.9%	
ani	Machinery	82	14.4%	51	14.9%	
<u>:</u>	Chemistry	56	9.8%	50	14.6%	
applicants	Food/medicine	5	0.9%	3	0.9%	
	Electronics	59	10.3%	30	8.7%	
Domestic	Others (manufacturing)	7	1.2%	2	0.6%	
Ĕ	Others (non-manufacturing)	36	6.3%	19	5.5%	
۵	Institutes/public research organization	18	3.2%	15	4.4%	
Pate	Patent attorneys		4.4%	14	4.1%	
Foreign-resident applicants		6	1.1%	0	0.0%	
Anonymous respondents		244	42.7%	145	42.3%	
Total		571	100.0%	343	100.0%	

⁴ Respondents were sorted into 9 sectors according to various industrial classifications, such as Japan Standard Industry Classification and the Report on Patent Examination Practices to Improve User-friendliness (February, 2011).

³ Questionnaire Sheets A and C used in the previous Surveys were replaced with Sheets 1 and 2 in FY2020 Survey. In Table 3, the response rates of Sheets 1 and 2 in and before FY2019 indicate those in Sheets A and C.

2. Aggregated Results

(1) Satisfaction level with overall quality of patent examination on national applications (Sheet 1)

Table 5 in the next page lists satisfaction levels of the overall quality of patent examination and the individual evaluation items (national applications) in FY2020.

Figure 1 shows year-to-year changes in levels of satisfaction with the overall quality of patent examination on national applications (overall satisfaction level)⁵. Respondents at the rate of 95.1% (97.3% in the previous year) evaluated the overall satisfaction level as *neutral* or higher, with positive responses⁶ of 63.0% (64.3% in the previous year).

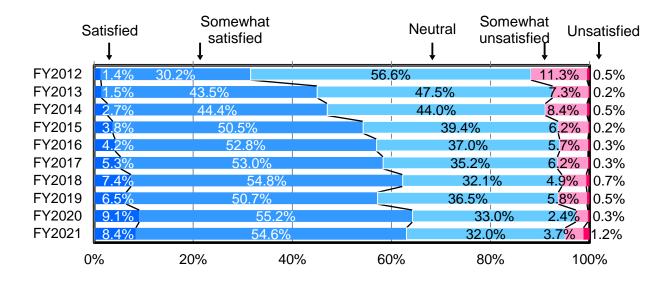


Figure 1: Satisfaction level with overall quality of patent examination on national applications (overall satisfaction level)

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⁵ In any graph showing a year-to-year change in this report, the vertical axis represents the fiscal year of Survey. As the Survey each year questions user satisfaction with examination conducted by the JPO in the previous fiscal year, the FY2021 Survey covers user satisfaction with examination conducted in FY2020.

⁶ The sum of "Satisfied" and "Somewhat satisfied"

Table 5: Satisfaction levels of the overall quality of patent examination and the individual evaluation items (national applications)⁷

	Gvaluat	JOH ICCIII	s (nationa	арріісас	10113/		
	Evaluation item	Satisfied	Somewhat Satisfied	Neutral	Somewhat Unsatisfied	Unsatisfied	Not sure/No experience or response
		Overall e	valuation	<u> </u>			
Overa	Il quality of patent examination	48 (8.4%)	312 (54.6%)	183 (32.0%)	21 (3.7%)	7 (1.2%)	0
	Indiv	idual eva	luation ite	ems			
	ugh and easy-to-understand otion in notifications of reasons for I	72 (12.7%)	327 (57.6%)	148 (26.1%)	19 (3.3%)	2 (0.4%)	3
	ugh and easy-to-understand otion in decision of refusal	68 (12.1%)	276 (49.2%)	203 (36.2%)	13 (2.3%)	1 (0.2%)	10
sions	Application of the main paragraph of Article 29 (1): industrial applicability and the concept of invention	77 (18.8%)	153 (37.4%)	171 (41.8%)	7 (1.7%)	1 (0.2%)	162
Application of provisions	Application of the Items of Article 29 (1): novelty	91 (16.1%)	266 (47.0%)	189 (33.4%)	17 (3.0%)	3 (0.5%)	5
ation c	Application of Article 29 (2): inventive step	41 (7.2%)	234 (41.2%)	223 (39.3%)	59 (10.4%)	11 (1.9%)	3
Applic	Application of Article 36 (4) (i) and Article 36 (6): descriptive requirements for description and claims	43 (7.6%)	207 (36.7%)	255 (45.2%)	52 (9.2%)	7 (1.2%)	7
Consis	stency of judgements among ners	22 (4.2%)	185 (35.1%)	239 (45.4%)	64 (12.1%)	17 (3.2%)	44
	on Article 29 (2): inventive step	29 (5.1%)	189 (33.4%)	234 (41.3%)	99 (17.5%)	15 (2.7%)	5
	on Article 36 (4) (i) and Article 36 (6): descriptive requirements for description and claims	28 (5.0%)	169 (30.2%)	279 (49.8%)	67 (12.0%)	17 (3.0%)	11
art	Domestic patent literature searches	94 (16.5%)	279 (48.9%)	177 (31.1%)	15 (2.6%)	5 (0.9%)	1
hes	Foreign patent literature searches	42 (7.9%)	149 (28.1%)	273 (51.5%)	58 (10.9%)	8 (1.5%)	41
Prior searches	Non-patent literature searches	29 (5.8%)	119 (23.7%)	280 (55.7%)	60 (11.9%)	15 (3.0%)	68
Level technic	of examiners ' expertise in cal details	43 (7.6%)	233 (41.1%)	236 (41.6%)	44 (7.8%)	11 (1.9%)	4
Respo	nses to written opinions	46 (8.1%)	244 (43.2%)	248 (43.9%)	19 (3.4%)	8 (1.4%)	6

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Percentages in brackets represent the ratio of valid responses (excluding Not sure / No experience or response). The percentages may not reach the sum of 100 due to rounding.

Communication with examiners		69	156	96	15	1	234
Commi	unication with examiners	(20.5%)	(46.3%)	(28.5%)	(4.5%)	(0.3%)	234
	in face-to-face interviews	55	130	78	9	1	200
	in face-to-face interviews	(20.1%)	(47.6%)	(28.6%)	(3.3%)	(0.4%)	298
	in talanhana ann an air	66	135	81	15	1	070
	in telephone conversations		(45.3%)	(27.2%)	(5.0%)	(0.3%)	273
Scope	of patents granted a	fter 35	244	248	27	6	1.1
exami	nation	(6.3%)	(43.6%)	(44.3%)	(4.8%)	(1.1%)	11

Figures 2 to 14 indicate year-to-year changes in levels of satisfaction with individual evaluation items⁸.

Ninety-five point three percent (95.3%) of the respondents evaluated the level of satisfaction with "communication with examiners in face-to-face interviews and telephone conversations" as *neutral* or higher with positive responses of 66.8% (97.0% and 71.0% respectively in the previous year), higher than our objective of 60% or higher (Figure 13).

The proportions of the respondents who evaluated "consistency of judgements among examiners" and "application of Article 29 (2): inventive step" as *neutral* or higher were 84.6% and 87.7%, respectively (86.2% and 88.3% in the previous year), and the proportions of positive responses were 39.3% and 48.4%, respectively (35.2% and 47.0% in the previous year) (Figures 8 and 6). These items are treated as priorities⁹, according to the Survey results in the previous fiscal year.

Many respondents provided comments on items "communication with examiners in face-to-face interviews and telephone conversations" and "consistency of judgements among examiners" in the comment boxes. About half of the respondents gave positive feedback on the former item, appreciating more user-friendly interviews after going online and examiners appropriately indicating their impression on proposed amendments. Many of the respondents also showed their expectations for an enhanced video-conference service for interviews and more smooth communication with examiners working remotely by telephone. As for the latter, some respondents expressed their expectations for improved consistency of judgements on descriptive requirements and inventive step.

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⁸ Individual items of "consistency of judgements among examiners on Article 29 (2): inventive step" and "consistency of judgements among examiners on Article 36 (4) (i) and Article 36 (6): descriptive requirements for description and claims" were introduced in the FY2019 Survey and items, such as "responses to written opinions", "communication with examiners in face-to-face interviews" and "communication with examiners in telephone conversations" were introduced for the last fiscal year, all of which are not included in the y-o-y change graphs.

⁹ Items to be addressed on a priority basis

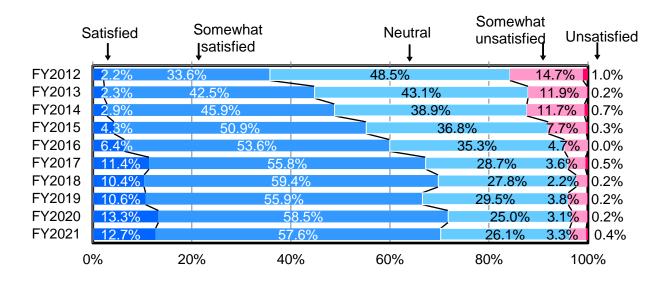


Figure 2: Satisfaction level with thorough and easy-to-understand description in notifications of reasons for refusal

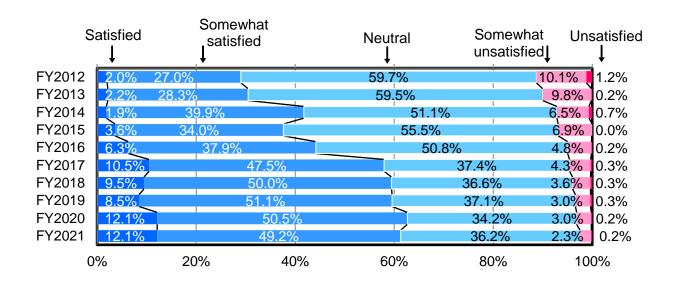


Figure 3: Satisfaction level with thorough and easy-to-understand description in decision of refusal

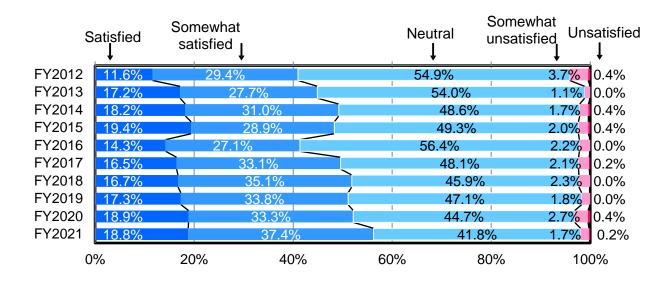


Figure 4: Satisfaction level with application of the main paragraph of Article 29 (1): industrial applicability and the concept of invention

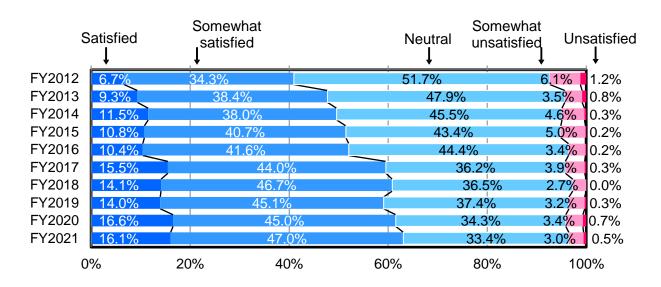


Figure 5: Satisfaction level with application of the items of Article 29 (1): novelty

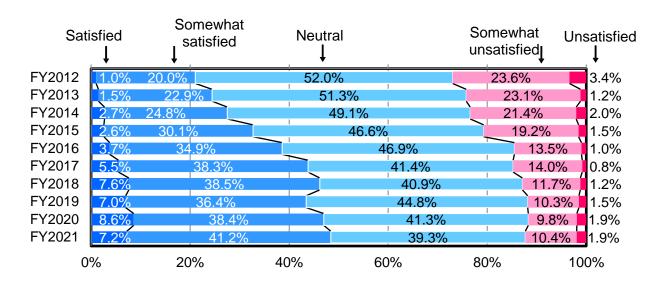


Figure 6: Satisfaction level with application of Article 29 (2): inventive step

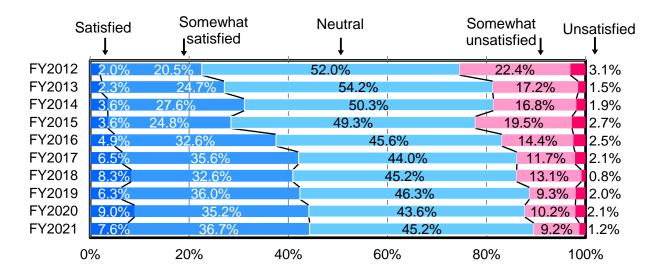


Figure 7: Satisfaction level with application of Article 36 (4) (i) and Article 36 (6): descriptive requirements for description and claims

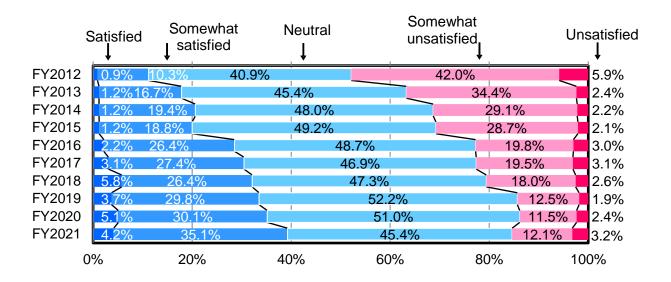


Figure 8: Satisfaction level with consistency of judgements among examiners

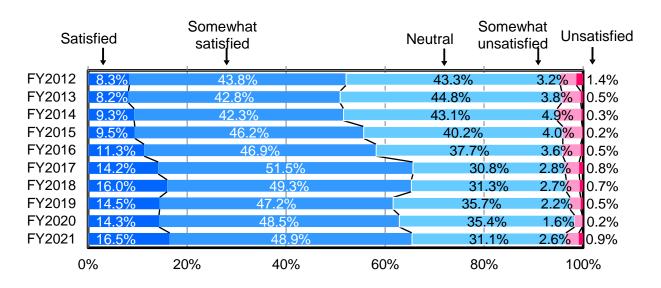


Figure 9: Satisfaction level with domestic patent literature searches

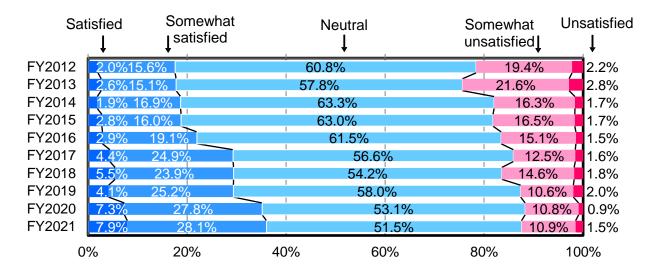


Figure 10: Satisfaction level with foreign patent literature searches

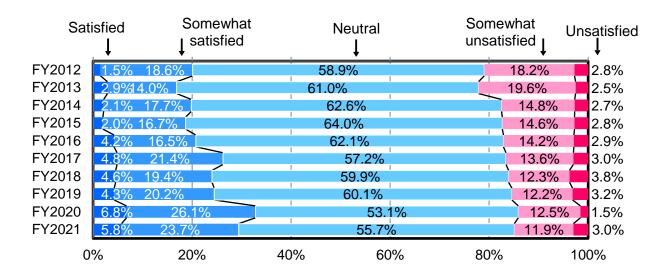


Figure 11: Satisfaction level with nonpatent literature searches

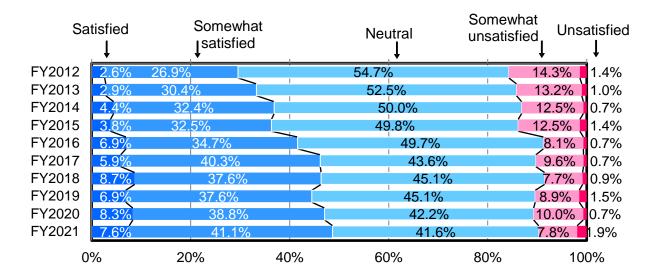


Figure 12: Satisfaction level with level of examiners' expertise in technical details

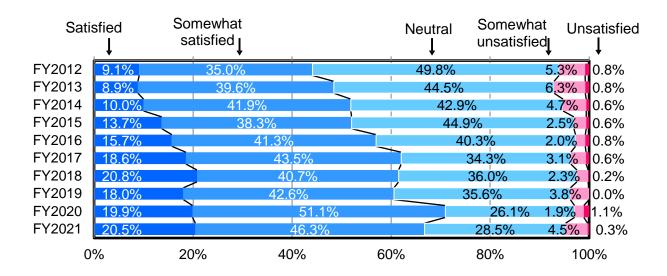


Figure 13: Satisfaction level with communication with examiners in face-to-face interviews and telephone conversations

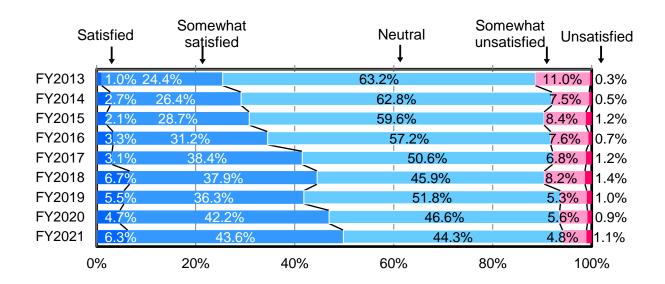


Figure 14: Satisfaction level with scope of patents granted after examination

(2) Satisfaction level of overall quality of the international search and international preliminary examination on PCT applications (Sheet 2)

Table 6 lists satisfaction levels of the overall quality and the individual evaluation items of the international search and international preliminary examination on PCT applications.

Table 6: Satisfaction levels of the overall quality and the individual evaluation items of the international search and international preliminary examination on PCT applications¹⁰

	micornational ocaron and micornational promin	ilai y Oxa		•	~PP.		_	
	Evaluation item	Satisfied	Somewhat Satisfied	Neutral	Somewhat Unsatisfied	Unsatisfied	Not sure/No experience or response	
	Overall eval	uation						
Overa	all quality of the international search and	25	190	119	9	0	0	
interr	national preliminary examination	(7.3%)	(55.4%)	(34.7%)	(2.6%)	(0.0%)	0	
	Individual evalua	ation iten	ns				-	
		54	139	125	2	0	00	
IPC a	occuracy	(16.9%)	(43.4%)	(39.1%)	(0.6%)	(0.0%)	23	
Judgement on excluded subject matter from searches		18	57	92	1	0	475	
		(10.7%)	(33.9%)	(54.8%)	(0.6%)	(0.0%)	175	
		31	110	150	7	1	4.4	
Juage	ement on unity of invention	(10.4%)	(36.8%)	(50.2%)	(2.3%)	(0.3%)	44	
المامارا	amont on marrolty/inventive atom	18	173	125	24	3	0	
Juage	ement on novelty/inventive step	(5.2%)	(50.4%)	(36.4%)	(7.0%)	(0.9%)	U	
Door	and statement regarding nevelty /inventive stan	31	178	113	20	1	0	
reas	oned statement regarding novelty/inventive step	(9.0%)	(51.9%)	(32.9%)	(5.8%)	(0.3%)	U	
Conc	istency of judgements in the international phase	18	144	149	25	2	5	
Colls	istericy of Judgements in the international phase	(5.3%)	(42.6%)	(44.1%)	(7.4%)	(0.6%)	3	
Cons	istency of judgements in the international and	36	120	121	52	6	8	
natio	nal phases	(10.7%)	(35.8%)	(36.1%)	(15.5%)	(1.8%)	0	
	Domostia natant literatura coarabas	48	178	104	11	2	0	
Domestic patent literature searches		(14.0%)	(51.9%)	(30.3%)	(3.2%)	(0.6%)	U	
sear	Foreign patent literature searches	13	94	178	47	3	8	
art s	i oreign patent interature scarones	(3.9%)	(28.1%)	(53.1%)	(14.0%)	(0.9%)	ð	
Prior art searches	Nonpatent literature searches	12	68	177	36	2	48	
ď	Tronpatont literature searones	(4.1%)	(23.1%)	(60.0%)	(12.2%)	(0.7%)	40	

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Percentages in brackets represent the ratio of valid responses (excluding Not sure / No experience or response). The percentages may not reach the sum of 100 due to rounding.

Figure 15 shows year-to-year changes in levels of satisfaction with the overall quality of the international search and international preliminary examination on PCT applications (overall satisfaction level). Respondents at the rate of 97.4% (97.2% in the previous year) evaluated the overall satisfaction level as *neutral* or higher, with positive responses¹¹ of 62.7% (59.2% in the previous year).

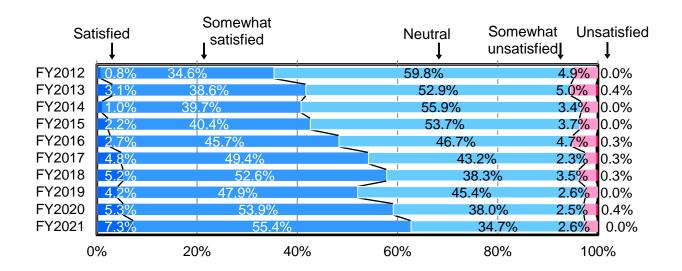


Figure 15: Satisfaction level with overall quality of the international search and international preliminary examination (overall satisfaction level)

Figures 16 to 25 indicate year-to-year changes in levels of satisfaction with individual evaluation items.

"Consistency of judgements in the international phase" and "judgement on novelty/inventive step" received *neutral* or higher responses of 92.0% and 92.1%, respectively (91.8% and 91.2% in the previous year), and the proportions of positive responses were 47.9% and 55.7%, respectively (46.1% and 52.8% in the previous year) (Figures 21 and 19). These items are treated as priorities 12, according to the Survey results in the previous fiscal year.

Many respondents provided comments on items "consistency of judgements in the international and national phases" and "prior art searches." Regarding the former item, they showed their expectations for improvement in changes of judgements due to additional citations and due to changes of examiners. As for the latter, they expected improvement in foreign patent literature searches.

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¹¹ The sum of "Satisfied" and "Somewhat satisfied"

¹² Items to be addressed on a priority basis

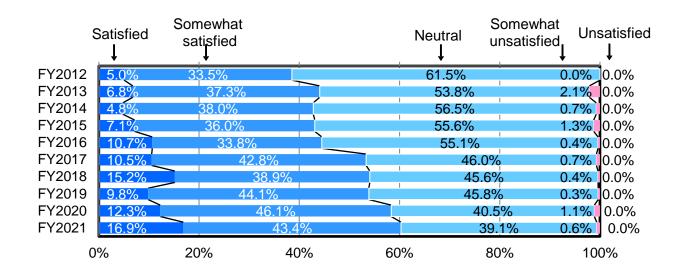


Figure 16: Satisfaction level with IPC accuracy

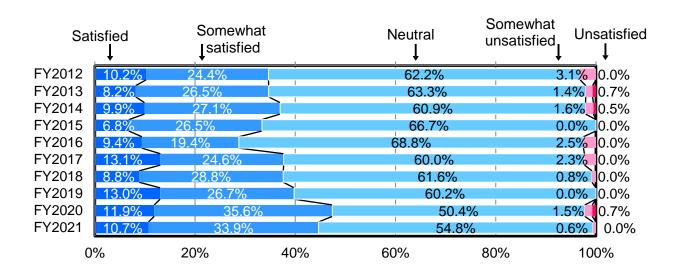


Figure 17: Satisfaction level with judgement on excluded subject matter from searches

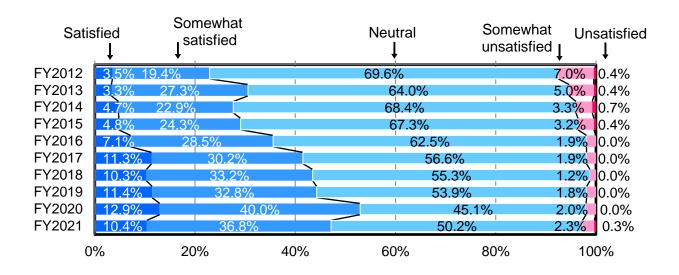


Figure 18: Satisfaction level with judgement on unity of invention

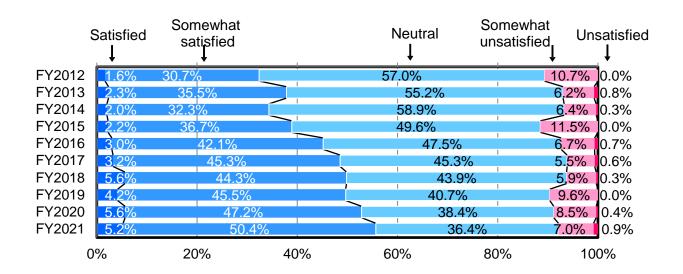


Figure 19: Satisfaction level with judgement on novelty/inventive step

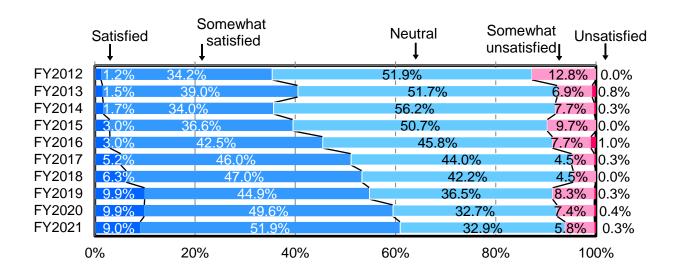


Figure 20: Satisfaction level with reasoned statement regarding novelty/inventive step

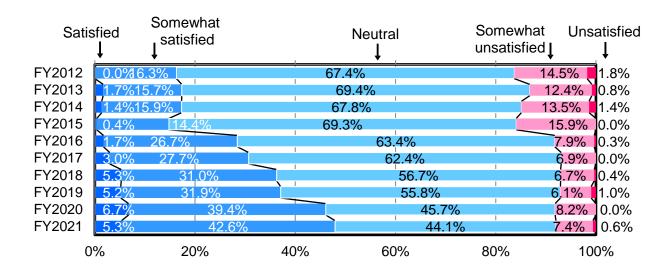


Figure 21: Satisfaction level with consistency of judgements in the international phase

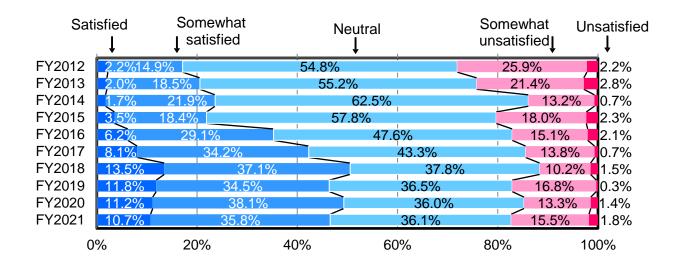


Figure 22: Satisfaction level with consistency of judgements in the international and national phases

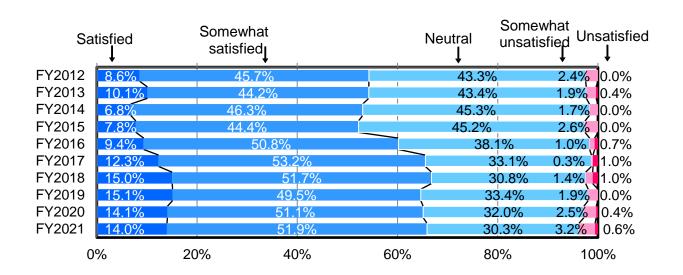


Figure 23: Satisfaction level with domestic patent literature searches

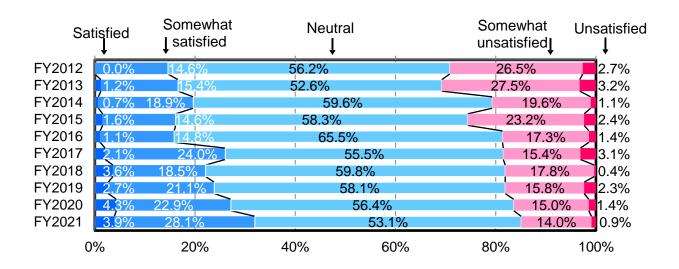


Figure 24: Satisfaction level with foreign patent literature searches

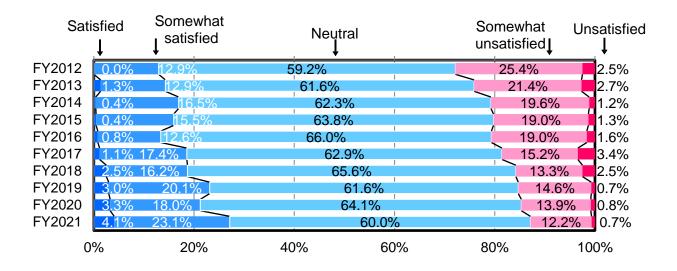


Figure 25: Satisfaction level with nonpatent literature searches

(3) Comparison with other national/regional Offices

Table 7 shows the aggregated results of a multiple-choice question as to in what items the JPO outperforms or is more desirable to perform than the other Offices in patent examination.

The JPO did not go beyond tying with the EPO for "prior art searches" among the evaluation items. Several respondents commented that the EPO excels at Chinese patent literature searches and nonpatent literature searches.

Table 7: Offices which the respondents think are superior or preferable for each evaluation item¹³

Evaluation Item	JPO	USPTO	EPO	CNIPA	KIPO
Thorough and easy-to-understand description in notifications of reasons for refusal	212	69	86	53	53
	(65.4%)	(21.3%)	(26.5%)	(16.4%)	(16.4%)
Judgement on industrial applicability and patent eligibility	105	32	45	24	24
	(32.4%)	(9.9%)	(13.9%)	(7.4%)	(7.4%)
Judgement on novelty/inventive step	180	46	113	35	29
	(55.6%)	(14.2%)	(34.9%)	(10.8%)	(9.0%)
Judgement on descriptive requirements	128	47	52	24	23
	(39.5%)	(14.5%)	(16.0%)	(7.4%)	(7.1%)
Consistency of judgements among examiners	163	19	91	16	21
	(50.3%)	(5.9%)	(28.1%)	(4.9%)	(6.5%)
Prior art searches	147	48	147	54	25
	(45.4%)	(14.8%)	(45.4%)	(16.7%)	(7.7%)
Level of examiners' expertise in technical details	185	23	89	24	23
	(57.1%)	(7.1%)	(27.5%)	(7.4%)	(7.1%)
Responses to written opinions	176	47	71	30	25
	(54.3%)	(14.5%)	(21.9%)	(9.3%)	(7.7%)
Communication with examiners in face-to-	106	60	14	6	5
face interviews	(32.7%)	(18.5%)	(4.3%)	(1.9%)	(1.5%)
Communication with examiners in telephone conversations	99 (30.6%)	69 (21.3%)	9 (2.8%)	15 (4.6%)	6 (1.9%)

¹³ Excluding responses "No examination experience at the Office/Not sure." Percentages in brackets represent the ratio of valid responses (excluding Not sure / No experience or response).

Scope of patent that was granted after	143	57	61	22	26
examination	(44.1%)	(17.6%)	(18.8%)	(6.8%)	(8.0%)

3. Result Analysis

(1) Correlation between the levels of satisfaction with each evaluation item and the overall quality of patent examination on national applications

Correlation coefficients can be used to measure relationships between the levels of satisfaction with each evaluation item and with the overall quality of patent examination.

Figure 26 shows correlation between the average levels of satisfaction¹⁴ with each of 18 evaluation items and the overall quality of patent examination on national applications, with the former on the x-axis and the latter on the y-axis. The JPO should improve on a priority basis evaluation items which received low levels of satisfaction (left side) in spite of high correlation coefficients with the overall level of satisfaction (upper side). This year's Survey reveals that evaluation items "consistency of judgements among examiners" and "consistency of judgements among examiners on Article 29 (2): inventive step" are the priorities¹⁵.

(2) Correlation between the levels of satisfaction with each evaluation item and the overall quality of the international search and international preliminary examination on PCT applications

Figure 27 shows correlation between the average levels of satisfaction¹⁴ with each of 10 evaluation items and the overall quality of the international search and international preliminary examination on PCT applications, with the former on the x-axis and the latter on the y-axis. This year's Survey reveals, as in (1) above, that "consistency of judgements in the international phase" is the priority¹⁵.

¹⁴ Average levels of satisfaction indicated in a 5-point scale, in which 5 indicates satisfied, 4 - somewhat satisfied, 3 - neutral, 2 - somewhat unsatisfied, and 1 – unsatisfied.

¹⁵ Items to be addressed on a priority basis

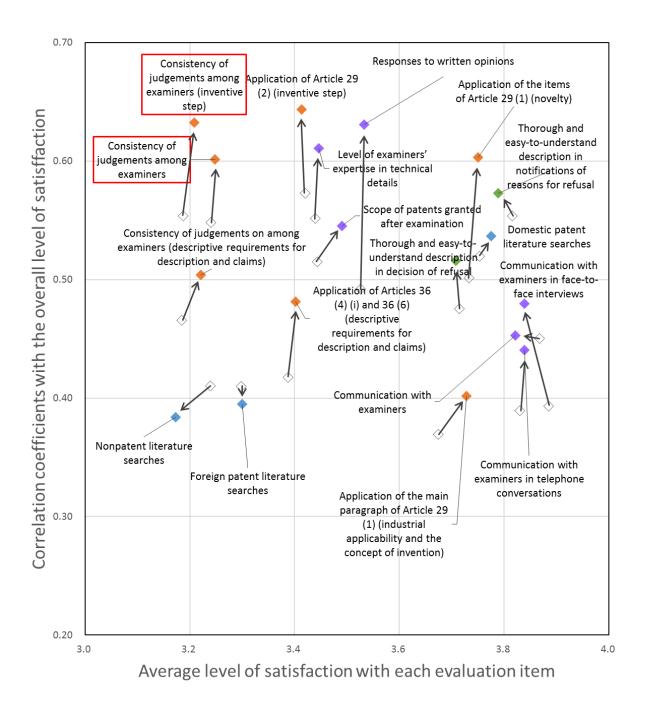


Figure 26: Average level of satisfaction for each evaluation item and correlation coefficients with overall satisfaction level (national applications)¹⁶

¹⁶Plots are colored according to evaluation types: Light blue for prior art searches; orange for judgements; green for descriptions in notifications; purple for others. White plots representing Survey results and arrows representing changes in correlation coefficients are from the previous year's Survey.

For 6 out of 18 evaluation items, the average level of satisfaction was lower than the previous year, while it was higher for the remaining 12 items. The 6 items with a lower average level of satisfaction are, in a descending order of how much the level was lowered, "nonpatent literature searches," "communication with examiners in face-to-face interviews," "communication with examiners in face-to-face interviews and telephone conversations," "thorough and easy-to-understand description in notifications of reasons for refusal," "thorough and easy-to-understand description in decision of refusal" and "application of Article 29 (2): inventive step." The remaining 12 items with a higher level of satisfaction are, in a descending order of how much the level was increased, "application of the main paragraph of Article 29 (1): industrial applicability and the concept of invention," "scope of

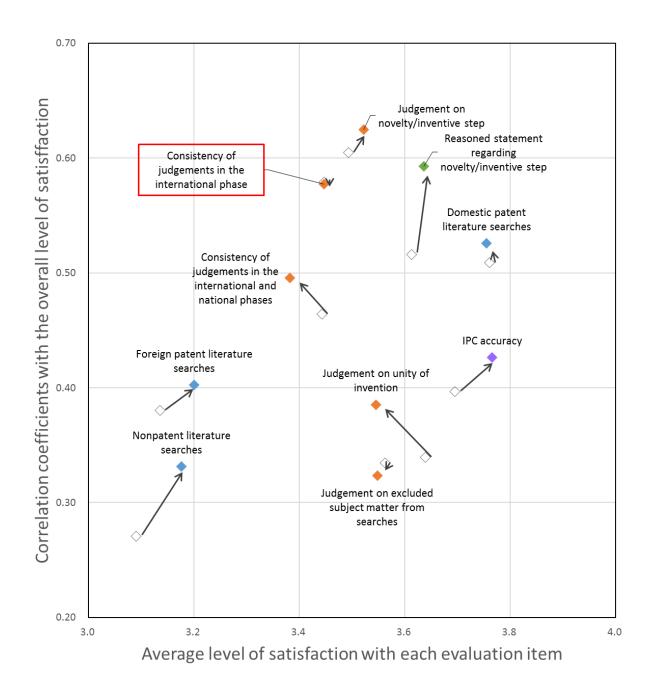


Figure 27: Average level of satisfaction for each evaluation item and correlation coefficients with overall satisfaction level (PCT applications)¹⁷

patents granted after examination," "consistency of judgements among examiners on Articles 36 (4) (i) and 36 (6): descriptive requirements for descriptions and claims," "domestic patent literature searches," "consistency of judgements among examiners on Article 29 (2): inventive step," "application of the items of Article 29 (1): novelty," "application of Articles 36 (4) (i) and 36 (6): descriptive requirements for description and claims," "communication with examiners in telephone conversations," "consistency of judgements among examiners," "level of examiners' expertise in technical details," "responses to written opinions" and "foreign patent literature searches."

¹⁷Plots are colored according to evaluation types: Light blue for prior art searches; orange for judgements; green for descriptions in notifications; purple for others. White plots representing

4. Summary of the Survey results

This year's Survey shows that 95.1% of the respondents (97.3% in the previous year) evaluated the level of satisfaction with the overall quality of patent examination on national applications as *neutral* or higher, with positive responses ¹⁸ of 63.0% (64.3% in the previous year), which means that there has been no significant change since last year. It showed no significant change, either, in the level of satisfaction with individual evaluation items (Figures 1 to 14).

Meanwhile, many respondents provided comments on "communication with examiners in face-to-face interviews and telephone conversations" and "consistency of judgements among examiners" among other items, showing their expectations for an enhanced video-conference service for interviews and more smooth communication with examiners working remotely by telephone.

The correlation analysis of the levels of satisfaction with each evaluation item and the overall quality revealed that "consistency of judgements among examiners" and "consistency of judgements among examiners on Article 29 (2): inventive step" are considered as priorities¹⁹ (Figure 26).

It was also shown that 97.4% of the respondents (97.2% in the previous year) evaluated the level of satisfaction with the overall quality of the international search and international preliminary examination on PCT applications as *neutral* or higher, with positive responses of 62.7% (59.2% in the previous year), which means that there has been no significant change since last year. It showed no significant change, either, in the level of satisfaction with individual evaluation items (Figures 15 to 25).

The correlation analysis of the levels of satisfaction with each evaluation item and the overall quality revealed that "consistency of judgements in the international phase" is considered as a priority (Figure 27).

Survey results and arrows representing changes in correlation coefficients are from the previous year's Survey.

For 5 out of 10 evaluation items, the average level of satisfaction was lower than the previous year, while it was higher for the remaining 5 items. The 5 items with a lower average level of satisfaction are, in a descending order of how much the level was lowered, "judgement on unity of invention," "consistency of judgements in the international and national phases," "judgement on excluded subject matter from searches," "domestic patent literature searches" and "consistency of judgements in the international phase." The remaining 5 items with a higher level of satisfaction are, in a descending order of how much the level was increased, "nonpatent literature searches," "IPC accuracy," "foreign patent literature searches," "judgement on novelty/inventive step" and "reasoned statement regarding novelty/inventive step."

¹⁸ The sum of "Satisfied" and "Somewhat satisfied"

¹⁹ Items to be addressed on a priority basis

With regard to the comments on "communication with examiners in face-to-face interviews and telephone conversations" in the Survey, the JPO enhanced its video-conference service for interviews²⁰ and developed a means for its examiners working remotely to reach users by telephone²¹ in April, 2021.

While making steady progress in current measures and initiatives to improve examination quality, we will address issues, such as "consistency of judgements among examiners," identified in this Survey with the help of other analysis results produced by us.

5. The Survey in the future

We will continue the Survey in the coming years to keep understanding our uses' needs, considering further improvement in the timing and method of the Survey, methods to select applicants to be surveyed and Survey questions among others.

This year's Survey results will be the basis of discussions on what to be improved in the implementation status and system of quality management in the Subcommittee on Examination Quality Management under the Intellectual Property Committee of the Industrial Structure Council.

Acknowledgment

We would like to express our gratitude to all the respondents for their cooperation in taking this Survey. We would also appreciate our users' further support as we need to continue to conduct the User Satisfaction Survey and improve patent examination and other operating practices based on Survey results, which will lead to a higher examination quality.

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²⁰ Microsoft Teams is now available alongside with V-CUBE and Skype for Business.

²¹ https://www.meti.go.jp/press/2021/04/20210401001/20210401001.html

<Appendix> Questionnaire Sheets of FY2021 Survey [Patent (Sheet 1)] Overall Quality of Patent Examination on National Applications (1/2) Please answer questions [1] to [4], according to your experience in the patent examination process (excluding appeal examination) in FY2020 [1] How would you rate the overall quality of patent examination at the JPO in FY2020? [Required] Satisfied Somewhat Neutral Somewhat Satisfied Unsatisfied [2] How would you rate the following items in patent examination at the JPO in FY2020? [All items are required] If you did not communicate with examiners, please select Not Sure/No Experience in items 8, 8-1, and 8-2. Item 9 means whether the scope of granted patent is sufficient or not, in view of the contents of the application and prior art. Not Sure/No Somewhat Somewhat Satisfied Neutral Unsatisfied Satisfied Unsatisfied Experience 1. Thorough and easy-to-understand description in notifications of reasons for refusal 2. Thorough and easy-to-understand description in decision of refusal 3-1. Application of the main paragraph of Article 29 (1) (industrial applicability and the concept of 3-2. Application of the items of Article 29 (1) (novelty) 3-3. Application of Article 29 (2) (inventive step) 3-4. Application of Articles 36 (4) (i) and 36 (6) (descriptive requirements for description and 4. Consistency of judgements among examiners 4-1. Consistency of judgements among examiners (inventive step) 4-2. Consistency of judgements among examiners (descriptive requirements for description and 5-1. Prior art searches (Domestic patent literature searches) 5-2. Prior art searches (Foreign patent literature searches) 5-3. Prior art searches (Nonpatent literature searches) 6. Level of examiners' expertise in technical details 7. Responses to written opinions 8. Communication with examiners in face-to-face interviews and telephone conversations 8-1. Communication with examiners in face-toface interviews 8-2. Communication with examiners in telephone 9. Scope of patents granted after examination Please feel free to comment on "8. Communication with examiners in face-to-face interviews and telephone conversations" (e.g. specific reasons for satisfaction/unsatisfaction). Please feel free to comment on other items in [2] (e.g. specific reasons for satisfaction/unsatisfaction).

[Patent (Sheet 1)] Overall Quality of Patent Examination on National Applications (2/2)

[3] Please select all Offices you think are superior at (or preferable for) the following items in patent examination.

Please leave all boxes unchecked if you feel that no office is superior at any item or if you are unable to compare.

Please check the box(es) in 0. Not sure/No experience if you are unsure about an office's examination quality or if you have an insufficient number of application examinations by an office to make a viable comparison.

JPO: Japan Patent Office, USPTO: United States Patent and Trademark Office, EPO: European Patent Office, CNIPA: China National Intellectual Property Administration, KIPO: Korean Intellectual Property Office

Item 11 means whether the scope of granted patent is sufficient or not, in view of the contents of the application and prior art.

	JPO	USPTO	EPO	CNIPA	KIPO
0. Not sure/No experience	0	0		0	0
Thorough and easy-to-understand description in notifications of reasons for refusal	0	0	0	0	0
2. Judgement on industrial applicability and patent eligibility	0	0		0	0
3. Judgement on novelty/inventive step	0	0		0	0
4. Judgement on descriptive requirements	0	0		0	
5. Consistency of judgements among examiners	0	0			
6. Prior art searches	0	0		0	0
7. Level of examiners' expertise in technical details	0	0		0	0
8. Responses to written opinions	0	0		0	0
9. Communication with examiners in face-to-face interviews	0	0		0	0
10. Communication with examiners in telephone conversations	0	0		0	0
11. Scope of patent that was granted after examination	0	0		0	0

Please feel free to comment on items in [3] or other national/regional offices.					
[4] Please provide any other comments/requests/suggestions in the column below.					

Request for User Satisfaction Survey on Quality of Examination on Specific Applications

We would also like to invite you to participate in our "<u>User Satisfaction Survey on Quality of Examination on Specific Applications</u>" regarding the quality of patent examination on specific national applications (sent final decisions within a year and published). We would appreciate your cooperation in helping us improve the quality of patent examination.

[Patent (Sheet 2)] Overall Quality of the International Search and International Preliminary Examination on PCT Applications Please answer questions [1] to [3], according to your experience in the international search and international preliminary examination process, including ISRs (Form PCT/ISA/210), WO/ISAs (Form PCT/ISA/237), and IPERs (Form PCT/ISA/409), in FY2020. [1] How would you rate the overall quality of the international search and international preliminary examination at the JPO in FY2020? [Required]

[2] How would you rate the following items in the international search and international preliminary examination at the JPO in FY2020? [All items are required]

Somewhat

Unsatisfied

Unsatisfied

Item 2 means judgement on excluded subject matter from searches falling under mathematical theories, methods of doing business, and mere presentations of information etc.

Item 7 means consistency of judgements between the international phase and the national phase at the JPO

O Somewhat Satisfied O Neutral

Satisfied

	Satisfied	Somewhat Satisfied	Neutral	Somewhat Unsatisfied	Unsatisfied	Not Sure/No Experience
1. IPC accuracy	0	0	0	0	0	0
Judgement on excluded subject matter from searches	0	0	0	0	0	0
3. Judgement on unity of invention	0	0	0	0	0	0
4. Judgement on novelty/inventive step	0	0	0	0	0	0
5. Reasoned statement regarding novelty/inventive step	0	0	0	0	0	0
6. Consistency of judgements in the international phase	0	0	0	0	0	0
7. Consistency of judgements in the international and national phases	0	0	0	0	0	0
8-1. Prior art searches (Domestic patent literature searches)	0	0	0	0	0	0
8-2. Prior art searches (Foreign patent literature searches)	0	0	0	0	0	0
8-3. Prior art searches (Nonpatent literature searches)	0	0	0	0	0	0

Please feel free to comment on items in [2] (e.g. specific reasons for satisfaction/unsatisfaction).				
[3] Please provide any other comments/requests/suggestions in the column below.				

Request for User Satisfaction Survey on Quality of Examination on Specific Applications

We would also like to invite you to participate in our "<u>User Satisfaction Survey on Quality of Examination on Specific Applications</u>" regarding the quality of the international search and international preliminary examination on specific PCT applications (examined within a year and published internationally). We would appreciate your cooperation in helping us improve the quality of the international search and international preliminary examination.