

(h) Indicate the number of plant species that are eligible to be protected by plant variety protection in your country and whether this number has changed over the past 10 years.

Since 1994, any plant is protectable under the PVPA. Prior to 1994, any plant except tubers (e.g., the Jerusalem artichoke or the Irish potato) was eligible under the PVPA.

Attachment D

Statistical Data Concerning Application Filings and Patent Grants in the Field of Biotechnology

Question (i) [filed/granted]	Question (ii) [filed/granted]	Question (iii)	Question (iv) [summary]
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AO1H;

AO1K 67/027, 67/033,
67/04;

CO7 H 21/02-21/04;

CO7K 2/00-16/46,
19/00;

C12N;

C12Q;

GO1N 33/50-33/98;

A61K, 35/12-35/84,
38/00-38/58, 39/00-
39/44, 48/00, 51/10.

Attachment E

Overview of Patent and Trademark Office
Information Systems and Other Resources
to Support Biotechnology Patent Examination

Statistics on USPTO Automated Search Sequence Systems and Support Costs

The Patent and Trademark Office Scientific and Technical Information Center (STIC) has procured an extensive collection of automated search systems. The most powerful systems used for sequence searching and analysis consists of three massively parallel computing systems that have been procured and installed between 1995 and 1997.

Throughput:

	<u>1995</u>	<u>1996</u>	<u>1997</u>
Total number of jobs processed :	30,186	132,640	219,100
Monthly average:	2,744	11,053	18,258
Percent increase from previous year:		339%	65%

Please Note: In calendar year 1995, PTO was still using the Sun servers and IGSuite for database sequence searching in addition to the MP1 system. (There is no data available for the number of jobs processed from the Sun servers/IGSuite system.) In calendar year 1996, the PTO switched entirely to the MP systems for all sequence searching. This information should help explain why there was such a drastic increase in the total number of jobs processed from 1995 to 1996.

As of January 9, 1998, the average length of a query sequence was 590 base pairs. This is a rough estimate, as the PTO receives sequences that range from 10 to 1,000,000 base pairs.

Commercial Databases Used in Sequence Searching:

The PTO subscribes to the following commercial databases: Embl-New, GenBank, GenBank-New, Geneseq-NA and AA, HIV-NA and AA, PIR, Swiss-Prot, and Uembl. In addition, the PTO in-house data consists of pending-NA and AA as well as issued-NA and AA, stored in IGSuite format. In the near future, PTO may store all of its own data in GCG format, so vendors should plan accordingly to make sure their system can comply with this data format.

Disk Storage Requirements:

As of January 1 of each year, the total disk storage space required for Commercial databases as well as in-house PTO data is as follows:

	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
	1.7GB	3.2GB	5.2GB	9.5GB
Percent increase:		88%	63%	83%

Group 1800 (Biotechnology) STIC Resource Demands and Support Costs

Reference Fulfillment Statistics:

Note: A crucial function served by the STIC is to obtain copies of articles from technical journals and other information sources not in the collections maintained by the STIC. These "reference fulfillment" services are necessary to satisfy the extensive requirements of Group 1800 for information that is not found in patent disclosures.

80% of the STIC Reference Fulfillment activities are to fulfill Group 1800 requests.

FY96 36,629 requests for cost of \$105,000.

FY97 (Oct-Aug) 40,813 requests for cost of \$124,000.

Annual Costs to Support Sequence Software and Searching:

GeneSeq	\$15,000/yr
IG Suite	\$12,500/yr
GCG	\$8,200/yr
Omiga	\$295/yr
MP Search	\$48,000/yr for 3 MasPar computers

Sequence Equipment:

Investment in massively parallel computing systems to date: \$3,366,262.00

Annual STIC Costs for Commercial Database Searches (non-sequence):

FY1996: \$1,017,794

FY1997: \$1,743,882

Staffing Requirements to Support Group 1800

Management:

2-Librarian or Technical Information Specialist (GS-14)

2-Program Analyst (GS-12) one handles procurements for ABSS and the other commercial databases.

Automated Biotechnology Search Systems (ABSS):

1-Computer Specialist (GS-13) (systems administrator)

1-Technical Information Specialist (GS-13) CRF team leader

1-Data Systems Specialist (GS-9,11,12) currently vacant (when position vacated, person was a grade 12)

1-Technical Information Specialist (GS-9,11,12) (currently is grade 12)

1-Data Entry Technician (GS-5,6,7) (currently is grade 7)

There is a grade 12 Computer Specialist detailed into the Systems Branch for 6 months.

Library:

1-Supervisory Technical Information Specialist or Librarian (GS-13)

10-Technical Information Specialist or Librarian (GS-9,11,12,13) (Currently nine staff are GS-13 and one is GS-12)

4-Library Technician (GS-5,6,7) (currently all are grade 7)

Reference Fulfillment Branch (Scientific Literature Division):

1-Supervisory Librarian (GS-12)

1-Supervisory Library Technician (GS-9)

5-Library Technician (GS-8)

2-Library Technician (GS-5)

5-Contract support staff (1 Librarian, 2 Library Technicians, 2 Systems types)
