

EXHIBIT 1



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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09/140,523 08/26/98 ORTON D P-046.63

JOHN E. HOEL
MORGAN & FINNEGAN, LLP
345 PARK AVENUE
NEW YORK NY 10154

LM02/0805

EXAMINER

CHAVIS, J.
ART UNIT PAPER NUMBER

10
2762

DATE MAILED: 08/05/99

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

Responsive to communication(s) filed on 5-3-99

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 11-30 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 11-30 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of Reference Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 2+4

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

Serial No. 09/140,523
Art Unit: 2762

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DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 11-30 are rejected under the judicially created doctrine of double patenting over claims 1-4 of U. S. Patent No. 5,379,432 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the difference between the claims in the '432 patent and the present application is that the claims in the present application are more generic (see claims 11,21 and 27) or merely and obvious variation of the claims presented in the '432 reference.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schmeler*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (C++ Report 1992). The applicant claims a system and method of enabling an object oriented program to access a procedural operating system using procedural function calls. The features of the applicant's claims are now presented in a side by side manner with the teachings of Schmidt.

Claims

Clm 11. A computer system, comprising:
computer hardware for performing native
system services;

a procedural operating system, having a
native interface, for controlling the computer
hardware to perform the native system
services;

object oriented methods requiring native
system services; and

procedural program logic code, responsive to
invocations of the object oriented methods,
for causing the procedural operating system
to control the computer hardware to perform
the required native system services.

Schmidt

see page 50 and fig. 1, OS Kernel
Services.

See again fig. 1 as indicated above
and the Existing C System Call API,
Which indicates that native services
Are provided for.

See the user application of fig. 1.

this feature is not provided for;
however, the system does enable
C++ (object oriented methods)
wrappers on an existing OS (native
Procedural Operating system). Also,
Schmidt indicates that it is possible to
use C Wrappers (page 54, right
column, 1st paragraph). He further
Indicates a disadvantage of using
C++ Wrappers-lack of support for
exception handling; therefore, it
would have been obvious to a person

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of ordinary skill in the art at the time of the invention to utilize C Wrappers as suggested by Schmidt to enable access to existing operating system functions by object oriented programs to enable a programmer use the new features of C++ without paying a heavy penalty for having to learn a new language immediately, to enable portability between the languages, and to not have to sacrifice the exception handling features of C.

Clm 12. The computer system of claim 11, wherein the procedural program logic code further comprises:
procedural program logic code portions specific to each object oriented method to issue one or more procedural function calls compatible with the native interfaces to control the native system services performed by the hardware environment to correspond to the native system services required by the object oriented method.

See page 54, the remote procedure calls, which indicates that That object oriented function are mapped transparently onto the appropriate system call that accesses the underlying OS mechanisms (native system services).

Clm 13. The computer system of claim 11 wherein the procedural program...

see the IPC services on page 54.

Means for causing the procedural operating system to provide one or more of the following native system services:

thread services, task services, virtual memory services, interprocess communication (IPC) services...

Clm 14. The computer system of claim 11 wherein the native interface of the...

see claim 11, supra.

Means responsive to the invocations of the

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object oriented methods for issuing procedural calls, compatible with the native interface, for controlling the computer hardware to perform the native system services.

Clm 15. The computer system of claim 14, wherein: the procedural operating system (OS) ...Unix or Windows...

See page 50, which indicates that The OS is Unix.

In reference to claims 21 and 25, see claim 11, above.

As per claim 26, see claim 13.

The features of claims 27-30 are taught via claim 14.

As per claims 16-20 and 22-24 (see the rejections above and also note that:), Schmidt does not indicate that memory is checked to determine if functions are already loaded; however, It would have been obvious to a person of ordinary skill in the art at the time of the invention to check to determine if data is loaded to keep from loading multiple copies into a primary storage space. The feature would have been obvious to provide efficient utilization of resources; since, all programs must be loaded into executable memory before they are executed (hence the name "executable memory").

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chavis whose telephone number is (703) 305-9665. The examiner can normally be reached on Monday-Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz (New Art Unit 2762), can be reached on (703) 305-9643. The fax phone number for this Group is (703) 305-0040.

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Art Unit: 2762

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



JQC
July 29, 1999



Indira K. Hatz
Supervisor Patent Examination
Technology Center (200)

Notice of References Cited

Application No. 09/140,523

Applicant(s) Orton et al.

Examiner Chavis, J.P.

Group Art Unit 2762

Page 1 of 1

U.S. PATENT DOCUMENTS

*	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
A	5,379,432	1-3-95	Orton et al.	709	303
B	5,446,902	8-29-95	Islam	395	703
C	5,752,034	5-12-98	Srivastava et al.	395	704
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					

FOREIGN PATENT DOCUMENTS

*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
N						
O						
P						
Q						
R						
S						
T						

NON-PATENT DOCUMENTS

*	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
U	Schmidt, D., SYSTEM Programming with C++ Wrappers, C++ Report, Sept./Oct. 1992, 1-7	9/92
V		
W		
X		

* A copy of this reference is not being furnished with this Office action.
(See Manual of Patent Examining Procedure, Section 707.05(a).)

140523

**NOTICE OF DRAFTPERSON'S
PATENT DRAWING REVIEW**

The drawing filed (insert date) 8/26/98 are:

- A. ~~_____~~ not objected to by the Draftperson under 37 CFR 1.84 or 1.152.
 B. ~~_____~~ objected to by the Draftperson under 37 CFR 1.84 or 1.152 as indicated below. The Examiner will require submission of new, corrected drawings where necessary. Corrected drawings must be submitted according to the instructions on the back of this notice.

<p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink. Color. _____ Color drawing are not acceptable until petition is granted. Fig.(s) _____ _____ Pencil and non black ink is not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) _____ Photographs are not acceptable until petition is granted, _____ 3 full-tone sets are required. Fig(s) _____ _____ Photographs not properly mounted (must bristol board or photographic double-weight paper). Fig(s) _____ _____ Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(e) _____ Paper not flexible, strong, white and durable. Fig.(s) _____ _____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not acceptable. (too thin) _____ Mylar, vellum paper is not acceptable (too thin). Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: _____ 21.0 cm by 29.7 cm (DIN size A4) _____ 21.6 cm by 27.9 cm (8 1/2 x 11 inches) _____ All drawings sheets not the same size. Sheet(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11 _____ Margins not acceptable. Fig(s) _____ _____ Top (T) _____ Left (L) _____ Right (R) _____ Bottom (B)</p> <p>6. VIEWS. CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes. _____ Views connected by projection lines or lead lines. Fig.(s) _____ Partial views. 37 CFR 1.84(h)(2) _____ Brackets needed to show figure as one entity. Fig.(s) _____ _____ Views not labeled separately or properly. Fig.(s) _____ _____ Enlarged view not labeled separately or properly. Fig.(s) _____</p>	<p>7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3) _____ Hatching not indicated for sectional portions of an object. Fig.(s) _____ _____ Sectional designation should be noted with Arabic or Roman numbers. Fig.(s) _____</p> <p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) _____ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned, so that the top becomes the right side, except for graphs. Fig.(s) _____ _____ Views not on the same plane on drawing sheet. Fig.(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) _____ Scale not large enough to show mechanism with crowding when drawing is reduced in size to two-thirds in reproduction. Fig.(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l) _____ Lines, numbers & letters not uniformly thick and well defined, clean, durable and black (poor line quality). Fig.(s) _____</p> <p>11. SHADING. 37 CFR 1.84(m) _____ Solid black areas pale. Fig.(s) _____ _____ Solid black shading not permitted. Fig.(s) _____ _____ Shade lines, pale, rough and blurred. Fig.(s) _____</p> <p>12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.48(p) _____ Numbers and reference characters, not plain and legible. Fig.(s) _____ _____ Figure legends are poor. Fig.(s) _____ _____ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(3) Fig.(s) _____ _____ English alphabet not used. 37 CFR 1.84(p)(3) Fig.(s) _____ _____ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig.(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) _____ Lead lines cross each other. Fig.(s) _____ _____ Lead lines missing. Fig.(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.48(t) _____ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Fig.(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) _____ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig.(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w) _____ Corrections not made from PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152 _____ Surface shading shown not appropriate. Fig.(s) _____ _____ Solid black shading not used for color contrast. Fig.(s) _____</p>
<p>COMMENTS</p>	

REVIEWER

A. D

DATE

9/14/98

TELEPHONE NO.

7033058404

ATTACHMENT TO PAPER NO.

10

PTO COPY



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/140,523	08/26/98	ORTON	D P-046.63

JOHN E. HOEL
MORGAN & FINNEGAN, LLP
345 PARK AVENUE
NEW YORK NY 10154

LM02/0201

EXAMINER

CHAVIS, J

ART UNIT

PAPER NUMBER

2762

DATE MAILED:

02/01/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/140,523	Applicant(s) Orton et al.
Examiner Chavis, J.G.	Group Art Unit 2762

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- Responsive to communication(s) filed on 11-4-99
- This action is **FINAL**
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- Claim(s) 11-30 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 11-30 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on _____ is approved disapproved.
- The drawing(s) filed on _____ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - All Some* None of the CERTIFIED copies of the priority documents have been received.
 - received in Application No. (Series Code/Serial Number) _____
 - received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s), _____
- Interview Summary, PTO-413
- Notice of Reference(s) Cited, PTO-892
- Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Other _____

Office Action Summary

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt, as cited in the previous action.
3. Applicant's arguments filed November 4, 1999 have been fully considered but they are not persuasive. The applicant indicates that Schmidt's system does not respond to invocations of the object-oriented methods at run-time and makes references to Schmidt's use of the term "inline functions" as proof that Schmidt's system is limited to compile-time. The applicant also mentions that Schmidt "refers repeatedly to the benefit of his technique as allowing error checking at "compile-time" rather than run-time", which is considered irrelevant since neither the applicant's system or Schmidt's system is designed for error checking. The applicant's claims also do not discuss error checking and neither does the examiner's response to the claims.

In reference to Schmidt's system not responding to invocations of the object-oriented methods at run-time, the examiner considers Schmidt's system to support the features. The features are indicated via the details of the Portability and Extensibility subheadings on page 4.

Under the portability section notice that "Application programs may then be written using a single object-oriented API, which is mapped **transparently** onto the appropriate system calls that access the particular underlying OS mechanisms." Transparent mapping is inherently a **run-time** function (ie. while running or executing).

Furthermore, under the extensibility subheading, notice the reference to **dynamic binding** (also a run-time feature) to "help improve the extensibility of the existing OS interfaces". "The goal is to allow applications to extend the original API's **without** modifying the design or implementation of the existing wrapper infrastructure."

Therefore, for the reasons cited in the previous action and the responses above, the rejection of claims 11-30 is consider proper in view of the teachings of Schmidt.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chavis whose telephone number is (703) 305-9665. The examiner can normally be reached on Monday-Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz (**New Art Unit 2762**), can be reached on (703) 305-9643. The fax phone number for this Group is (703) 305-0040.

Application/Control Number: 09/140,523
Art Unit: 2762

Page 4

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



JQC
January 28, 2000



Stamp: RECEIVED
JAN 28 2000
GROUP RECEPTIONIST



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/140,523	08/26/98	ORTON	D P-046.63

JOHN E. HOEL
MORGAN & FINNEGAN, LLP
345 PARK AVENUE
NEW YORK NY 10154

LMC1/0802

EXAMINER

CHAVIS, J

ART UNIT PAPER NUMBER


2762

17

DATE MAILED: 08/02/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/140,523	Applicant(s) Orton et al.	
	Examiner John Chavis	Group Art Unit 2762	

Responsive to communication(s) filed on Jun 29, 2000

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

Claim(s) 12, 16-20, and 22-30 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

Claim(s) _____ is/are allowed.

Claim(s) 12, 16-20, and 22-30 is/are rejected.

Claim(s) _____ is/are objected to

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s) _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Serial No. 09/140,523
Art Unit: 2762

1

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (C++ Report 1992). The applicant claims a system and method of enabling an object oriented program to access a procedural operating system using procedural function calls. The applicant further claims that his system checks that objects are loaded prior to invocation and if not loading the objects via a runtime loader. The features of the applicant's claims are now presented in a side by side manner with the teachings of Schmidt.

Claims

Clm 16. A computer system, comprising:
computer hardware for performing native
system services;

a procedural operating system, having a
native interface, for controlling the computer
hardware to perform the native system
services;

Schmidt

see page 50 and fig. 1, OS Kernel
Services.

See again fig. 1 as indicated above
and the Existing C System Call API,
Which indicates that native services
Are provided for.

Serial No. 09/140,523
Art Unit: 2762

2

object oriented methods requiring native system services; and

procedural program logic code, responsive to invocations of the object oriented methods, for causing the procedural operating system to control the computer hardware to perform the required native system services.

See the user application of fig. 1.

this feature is not provided for; however, the system does enable C++ (object oriented methods) wrappers on an existing OS (native Procedural Operating system). Also, Schmidt indicates that it is possible to use C Wrappers (page 54, right column, 1st paragraph). He further Indicates a disadvantage of using C++ Wrappers-lack of support for exception handling; therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize C Wrappers as suggested by Schmidt to enable access to existing operating system functions by object oriented programs to enable a programmer use the new features of C++ without paying a heavy penalty for having to learn a new language immediately, to enable portability between the languages, and to not have to sacrifice the exception handling features of C.

The applicant indicates that Schmidt's system does not respond to invocations of the object-oriented methods at run-time and makes references to Schmidt's use of the term "inline functions" as proof that Schmidt's system is limited to compile-time. The applicant also mentions that Schmidt "refers repeatedly to the benefit of his technique as allowing error checking at "compile-time" rather than run-time", which is considered irrelevant since neither the applicant's system or Schmidt's system is designed for error checking. The applicant's claims also do not discuss error checking and neither does the examiner's response to the claims.

In reference to Schmidt's system not responding to invocations of the object-oriented methods at run-time, the examiner considers Schmidt's system to support the features. The features are indicated via the details of the Portability and Extensibility subheadings on page 4. Under the portability section notice that "Application programs may then be written using a single object-oriented API, which is mapped transparently onto the appropriate system calls that access the particular underlying OS mechanisms." Transparent mapping is inherently a run-time

Serial No. 09/140,523
Art Unit: 2762

3

function (ie. while running or executing).

Furthermore, under the extensibility subheading, notice the reference to **dynamic binding** (also a run-time feature, ie. not a feature specified by the developer) to "help improve the extensibility of the existing OS interfaces". "The goal is to allow applications to extend the original API's without modifying the design or implementation of the existing wrapper infrastructure."

However, assuming that the applicant is correct in indicating that Schmidt does not teach or suggest the feature of loading information during runtime, the feature is taught by Janis et al. (5,247,681) to reduce the amount of memory required at runtime to improve memory management, see col. 3 lines 6-21.

executable program memory associated with the computer hardware for runtime execution of the procedural operating system, invocations of the object-oriented methods and related portions of the procedural program logic code;

see col. 3 lines 24-37.

means for making determinations during runtime execution if object-oriented methods to be invoked are present in the executable program memory; and

see again the cited portions directly Above.

a runtime loader, responsive to the determinations, to selectively load required object-oriented methods into the executable program memory during runtime before invocation of the object-oriented methods.

See col. 3 lines 64-col. 4 line 15.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the feature taught by Janis in Schmidt's system for the same reasons specified by Janis to reduce the amount of runtime loading of modules to improve memory management by only loading modules that have not previously been loaded. The feature would have been obvious to a person of ordinary skill in the art at the time of the invention because it would all one to improve access times to items that are already loaded.

Therefore, for the reasons cited in the previous action and the responses above, the rejection of claims 12, 16-20 and 22-30 is considered proper in view of the teachings of Schmidt.

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Art Unit: 2762

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Clm 12. The computer system of claim 16, wherein the procedural program logic code further comprises:
procedural program logic code portions specific to each object oriented method to issue one or more procedural function calls compatible with the native interfaces to control the native system services performed by the hardware environment to correspond to the native system services required by the object oriented method.

See page 54, the remote procedure calls, which indicates that That object oriented function are mapped transparently onto the appropriate system call that accesses the underlying OS mechanisms (native system services).

In reference to claim 25, see claim 16, above.

As per claim 26, see claim 12.

The features of claims 27-30 are taught via claim 12.

As per claims 17-20 and 22-24 (see the rejections above and also note that:), Schmidt does not indicate that memory is checked to determine if functions are already loaded; however, It would have been obvious to a person of ordinary skill in the art at the time of the invention to check to determine if data is loaded to keep from loading multiple copies into a primary storage space. The feature would have been obvious to provide efficient utilization of resources; since, all programs must be loaded into executable memory before they are executed (hence the name "executable memory").

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chavis whose telephone number is (703) 305-9665. The examiner can normally be reached on Monday-Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz (New Art

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Art Unit: 2762

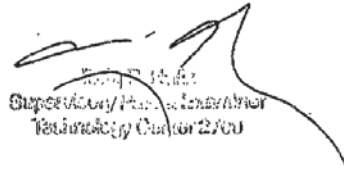
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Unit 2762), can be reached on (703) 305-9643. The fax phone number for this Group is (703) 305-0040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



JQC
July 31, 2000



Supervisor/Team Leader/Member
Technology Center 2700

Notice of References Cited		Application No. <i>09/140,523</i>	Applicant(s) <i>Orton et al.</i>		9	
		Examiner <i>Chavis, J. P.</i>	Group Art Unit <i>2762</i>	Page <i>1</i> of <i>1</i>		
U.S. PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	
A	<i>5,247,681</i>	<i>9-21-93</i>	<i>Janis et al.</i>	<i>709</i>	<i>305</i>	
B	<i>5,339,430</i>	<i>8-16-94</i>	<i>Lundin et al.</i>	<i>709</i>	<i>305</i>	
C	<i>5,901,313</i>	<i>5-4-99</i>	<i>Wolf et al.</i>	<i>345</i>	<i>330</i>	
D	<i>5,555,418</i>	<i>9-10-96</i>	<i>Nilsson et al.</i>	<i>709</i>	<i>305</i>	
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* A copy of this reference is not being furnished with this Office action.
(See Manual of Patent Examining Procedure, Section 707.05(a).)



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Docket No. 3048-7035US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Orton et al. OTLC Docket: P-046.63
Serial No.: 09/140,523 Group Art Unit: 2762
Filed: August 26, 1998 Examiner: J. Chavis
For: OBJECT-ORIENTED OPERATING SYSTEM

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JAN 17 2001

Technology Center 2100

AMENDMENT

Honorable Assistant Commissioner
of Patents and Trademarks
Washington, D.C. 20231
Sir:

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In response to the Office Action of August 2, 2000, please amend the application as follows:

IN THE CLAIMS:

Please amend claim 16 as follows:

16. (TWICE AMENDED) A computer system, comprising:
computer hardware for performing native system services;
a procedural operating system, having a native interface, for controlling the computer hardware to perform the native system services;
object oriented methods requiring native system services;
procedural program logic code, responsive to invocations of the object-oriented methods during runtime, for causing the procedural operating system to control the computer hardware to perform the required native system services;
executable program memory associated with the computer hardware for runtime execution of the procedural operating system, invocations of the object-oriented methods and related portions of the procedural program logic code;

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means for making determinations during runtime execution if object-oriented methods to be invoked are present in the executable program memory; and
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could
 a runtime loader, responsive to the determinations, to selectively load required object-oriented methods into the executable program memory during runtime before invocation of the object-oriented methods.

Please amend claim 22 as follows:

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 22. (TWICE AMENDED) A method for operating a computer system, comprising the steps of:
 executing a procedural operating system on computer hardware, the procedural operating system including a native interface, responsive to procedural function calls, for providing native system services;
12
 issuing calls during runtime, compatible with the native interface, to provide the native system services in response to invocations of object-oriented methods requiring such native system services;
 determining during runtime if object-oriented methods to be invoked during runtime execution are present in executable program memory associated with the computer hardware;
 and
 selectively loading the object-oriented methods into the executable program memory during runtime before invocation thereof, if not yet loaded.

Please amend claim 27 as follows:

12
 27. (TWICE AMENDED) A method for operating a computer system, comprising the steps of:
 executing a procedural operating system, based on Windows or Unix operating systems, on a Unix or IBM compatible computer hardware environment;
23
cont
 providing an object-oriented interface, executing on the computer hardware environment, and responsive to object-oriented programming, for instantiating objects from object-oriented

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classes, encapsulating data for exclusive use with each object, and invoking object-oriented methods in the objects for operating on the encapsulated data;

providing procedural programming logic code, responsive during runtime to selected ones of said invoked object-oriented methods requiring native system services, for issuing procedural calls, compatible with a native interface of the procedural operating system, to cause the hardware environment to provide the native system services in response to the object-oriented methods;

and

loading the methods during runtime before invocation thereof;

whereby a choice of which system implementation to use can be deferred to run-time.

Please add new claim 31 as follows:

¹⁶ 31. (NEW) A method for operating a computer system including a memory, comprising the steps of:

storing in the memory a library of procedural program logic code;

said library including first procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform first type native system services;

said library including second procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform second type native system services different from said first type;

executing a procedural operating system in the memory, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

running an object-oriented program in a task address space of the memory, the program including an object-oriented method requiring the second type native system services;

determining during runtime whether said second type procedural program logic code is available in said task address space; and

loading said second type procedural program logic code into said task address space during runtime.

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[Please add new claim 32 as follows:]

32. (NEW) A method for operating a computer system including an executable program memory, comprising the steps of:

storing in the computer system a library of procedural program logic code;

said library including first procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform first type native system services;

said library including second procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform second type native system services different from said first type;

executing a procedural operating system in the executable program memory, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

running an object-oriented program in the executable program memory, the program including an object-oriented method requiring the second type native system services;

determining during runtime whether said second type procedural program logic code is available in the executable program memory; and

loading said second type procedural program logic code into the executable program memory during runtime.

*ref
cont*

[Please add new claim 33 as follows:]

33. (NEW) A method for operating a computer system including an executable program memory, comprising the steps of:

storing in the computer system a library of procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform native system services;

executing a procedural operating system in the executable program memory, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

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running an object-oriented program in the executable program memory, the program including an object-oriented method requiring native system services;

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services; and

loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services.

Please add new claim 34 as follows:

^A
34. (NEW) A method for operating a computer system including an executable program memory, comprising the steps of:

storing in the computer system a library of procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform native system services;

executing a procedural operating system in the computer system, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

running an object-oriented program in the executable program memory, the program including an object-oriented method requiring native system services;

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services; and

loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services.

Please add new claim 35 as follows:

²⁰
35. (NEW) A computer system including an executable program memory, comprising:

a library of procedural program logic code in the computer system which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform native system services;

a procedural operating system in the computer system, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

an object-oriented program in the executable program memory, the program including an object-oriented method requiring native system services;

a processor in the computer system for determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services; and

said processor loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services.

[Please add new claim 36 as follows:]

²¹

36. (NEW) A method for operating a computer system including an executable program memory, comprising the steps of:

storing in the computer system a library of procedural program logic code which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform native system services;

executing a procedural operating system in the computer system, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

running an object-oriented program in the executable program memory, the program including an object-oriented method requiring native system services;

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services;

loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services;

invoking said object-oriented method of said object-oriented program during runtime; and

responding with said loaded procedural program logic code to said invoking step to cause said procedural operating system to control the computer system to perform said required native system services.

[Please add new claim 37 as follows:]

²²

37. (NEW) A computer system including an executable program memory, comprising:

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a library of procedural program logic code in the computer system which is responsive to invocations of object-oriented methods, for causing a procedural operating system to control the computer system to perform native system services;

a procedural operating system in the computer system, the procedural operating system including a native interface responsive to procedural function calls, for providing native system services;

an object-oriented program in the executable program memory, the program including an object-oriented method requiring native system services;

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a processor in the computer system for determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services;

said processor loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services;

said processor invoking said object-oriented method of said object-oriented program during runtime; and

said loaded procedural program logic code responding to said invoking to cause said procedural operating system to control the computer system to perform said required native system services.

REMARKS

STATUS OF THE CLAIMS

Claims 12, 16-20, 22-30, as amended, remain in the case remain in the case and new claims 31 to 37 are added to the case.

REJECTION OF THE CLAIMS OVER THE PRIOR ART

Claims 12, 16-20, 22-30 were rejected under 35 U. S. C § 103 as being unpatentable over Schmidt, "Systems Programming With C++ Wrappers", C++ Report, October 1992.

Claims 12, 16-20, 22-30 were further rejected over a combination of the Schmidt reference and Janis et al. US patent 5,247,681. The Examiner's rejection reads as follows:

Therefore, it would be obvious to a person of ordinary skill in the art at the time of the invention to utilize the feature taught by Janis (US patent 5,247,681) in Schmidt's system for the same reasons specified by Janis to reduce the amount of runtime loading of modules to improve memory management by only loading modules that have not previously been loaded. The feature would have been

obvious to a person of ordinary skill in the art at the time of the invention because it would it would all one to improve access times to items that are already loaded.

APPLICANT'S RESPONSE

The following remarks are in response to the Examiner's Office action of August 2, 2000.

[1] The Applicant's prior remarks in the Preliminary Amendment of June 28, 2000, concerning the Schmidt reference are incorporated herein by reference.

[2] The Office action of August 2, 2000 provides a table on pages 1 and 2, applying the Applicant's claim 16 to the Schmidt reference. In particular, the Office action quotes the Applicant's "procedural program logic code" claim limitation, which reads as follows:

procedural program logic code, responsive to invocations of the object-oriented methods, for causing the procedural operating system to control the computer hardware to perform the required native system services;

The table in the Office action, concerning the Applicant's "procedural program logic code" claim limitation, reads as follows:

this feature is not provided for; however, the system does enable C++ (object oriented methods) wrappers on an existing OS (native Procedural Operating system). Also, Schmidt indicates that it is possible to use C Wrappers (page 54, right column, 1st paragraph). He further Indicates a disadvantage of using C++ Wrappers-lack of support for exception handling; therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize C Wrappers as suggested by Schmidt to enable access to existing operating system functions by object oriented programs to enable a programmer use the new features of C++ without paying a heavy penalty for having to learn a new language immediately, to enable portability between the languages, and to not have to sacrifice the exception handling features of C.

In response, the Applicant points out that the "C Wrappers" which the Examiner is equating to the Applicant's claimed "native system services", is not in fact a native system service. A "C wrapper", as used in the Schmidt reference, and as is commonly acknowledged in the art, is an interface between programming constructs provided by the C programming language. A "C wrapper" is not a native system service of an operating system. Native system services are performed by computer hardware in response to calls to an operating system, such as the service of accessing data stored on a disk drive or the service of allocating storage areas in a memory.

[3] In the Office action of August 2, 2000, the second last paragraph on page 2 reads as follows:

The applicant indicates that Schmidt's system does not respond to invocations of the object-oriented methods at run-time and makes references to Schmidt's use of the term "inline functions" as proof that Schmidt's system is limited to compile-time. The applicant also mentions that Schmidt "refers repeatedly to the benefit of his technique as allowing error checking at "compile-time" rather than run-time", which is considered irrelevant since neither the applicant's system or Schmidt's system is designed for error checking. The applicant's claims also do not discuss error checking and neither does the examiner's response to the claims.

In response, the Applicant must point out that the issue is whether the Schmidt reference discloses or suggests the Applicant's claimed steps or means for performing the steps of:

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services; and
loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services in response to the determining step.

Still further, an additional issue is whether the Schmidt reference discloses or suggests the Applicant's additionally claimed steps or means for performing the steps of:

invoking said object-oriented method of said object-oriented program during runtime following the loading step; and
responding by said loaded procedural program logic code to said invoking to cause said procedural operating system to control the computer system to perform said required native system services.

The declarations by the Schmidt reference concerning error checking are pointed to by the Applicant as evidence that the Schmidt reference is limited to compile-time operations. The Schmidt reference fails to disclose or suggest the runtime steps of determining and loading claimed by the Applicant. Furthermore, the Schmidt reference fails to disclose or suggest the runtime steps of invoking and responding claimed by the Applicant. Further, the Schmidt reference fails to disclose or suggest the system operating during runtime to perform those steps claimed by the Applicant.

[4] In the Office action of August 2, 2000, the last paragraph on page 2 reads as follows (emphasis in original):

In reference to Schmidt's system not responding to invocations of the object-oriented methods at run-time, the examiner considers Schmidt's system to support the features. The features are indicated via the details of the Portability and Extensibility subheadings on page 4. Under the portability section notice that "Application programs may then be written using a single object-oriented API, which is mapped **transparently** onto the appropriate system calls that access the particular underlying OS mechanisms." Transparent mapping is inherently a **run-time** function (i.e. while running or executing).

In response, the Applicant must point out that the word "transparently" quoted in the Office action is not an enabling disclosure of the Applicant's claimed invention. In order to be effective as prior art, the reference must provide a disclosure sufficient to enable a person skilled in the art to make and use the claimed invention. The characterization of a "transparent mapping" for an "object oriented API" is obscure. The Examiner is using the Applicant's own description of the claimed invention as a road map to interpret the ambiguous disclosure in the Schmidt reference. The Schmidt reference fails to disclose or suggest the Applicant's claimed steps or means for performing the steps of:

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services;
and
loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services in response to the determining step.

Still further, the Schmidt reference fails to disclose or suggest the Applicant's additionally claimed steps or means for performing the steps of:

invoking said object-oriented method of said object-oriented program during runtime following the loading step; and
responding by said loaded procedural program logic code to said invoking to cause said procedural operating system to control the computer system to perform said required native system services.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970).

[5] In the Office action of August 2, 2000, the first full paragraph on page 3 reads as follows (emphasis in original):

Furthermore, under the extensibility subheading, notice the reference to **dynamic binding** (also a run-time feature, i.e. not a feature specified by the developer) to "help improve the extensibility of the existing OS interfaces". "The goal is to allow applications to extend the original API's **without** modifying the design or implementation of the existing wrapper infrastructure."

In response, the Applicant must point out that the phrase "dynamic binding" quoted in the Office action is not an enabling disclosure of the Applicant's claimed invention. In order to be effective as prior art, the reference must provide a disclosure sufficient to enable a person skilled in the art to make and use the claimed invention. The characterization of "dynamic binding" for an "original API without modifying the design" is obscure. The Examiner is using the Applicant's own description of the claimed invention as a road map to interpret the ambiguous disclosure in the Schmidt reference. The Schmidt reference fails to disclose or suggest the Applicant's claimed steps or means for performing the steps of:

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services;
and
loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services in response to the determining step.

Still further, the Schmidt reference fails to disclose or suggest the Applicant's additionally claimed steps or means for performing the steps of:

invoking said object-oriented method of said object-oriented program during runtime following the loading step; and
responding by said loaded procedural program logic code to said invoking to cause said procedural operating system to control the computer system to perform said required native system services.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, op. cit.; "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, op. cit.

[6] In the Office action of August 2, 2000, on page 3, the Office action applies the Janis patent. The Examiner's comments read as follows:

However, assuming that the applicant is correct in indicating that Schmidt does not teach or suggest the feature of loading information during runtime, the feature is taught by Janis et al. (5,247,681) to reduce the

amount of memory required at runtime to improve memory management, see cot. 3 lines 6-21.

The Applicant responds that the Janis reference does not disclose what the Examiner is suggesting. In applying the Janis patent, the table on page 3 of the Office action reads the "executable program memory" limitation of the Applicant's claim 16 onto the cited Summary of the Invention section at Column 3, lines 24-37 of the Janis patent, which reads as follows:

The present invention overcomes the deficiencies of the previous techniques by providing a system and method for sharing previously loaded software modules which are part of a computer program without having to place them in a common area of main memory of a computer system. More specifically, the present invention keeps track of the location of any software modules which remain loaded in a private area of main memory, having been loaded by a previous execution of the computer program. In this way, a subsequent execution of that computer program requiring those software modules can immediately access them rather than having to re-load them into memory.

In response, the Applicant asserts that the cited section at Column 3, lines 24-37 of the Janis reference teaches away from the Applicant's claimed invention. Janis is describing sharing previously loaded software modules. Janis says it twice in the same quotation used by the Examiner. The Applicant is claiming a runtime loader that selectively loads the required object-oriented methods into the executable program memory during runtime before invocation of the object-oriented methods. The Janis reference teaches away from the Applicant's claimed invention. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Combining the Janis reference with the Schmidt reference would change the principle of operation alleged by the Examiner to be present in the Schmidt reference. Combining the Janis reference with the Schmidt reference would render the operation alleged by the Examiner to be present in the Schmidt reference to become unsatisfactory for its intended purpose. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

As pointed out by Judge Rich in In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991), the suggestion for the combination and the likelihood of success can not come from the applicant's disclosure. Specifically Judge Rich wrote:

Where claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under §103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. See *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure.

The Federal Circuit has stated this principle in still other cases. For example, "In proceedings before the Patent and Trademark office, the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references...." *In re John R. Fritch*, 972 F.2d 1260, 1265 (Fed. Cir. 1992). However, the suggestion "must be other than the knowledge learned from the applicant's disclosure." *In re the Dow chemical Co.* 837 F.2d 469 (Fed. Cir. 1988) Furthermore, "[I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re John R. Fritch*, 972 F.2d at 1266 (Fed. Cir. 1992); *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127.

There is no motivation to combine the Schmidt reference with the Janis reference, since the resulting combination is not the same as the Applicant's claimed invention and would not accomplish the same result as that of the Applicant's claimed invention. The Janis reference teaches away from the Applicant's claimed invention, so why would anyone want to combine it with Schmidt, as the Examiner suggests.

Furthermore, the combination of the Schmidt reference with the Janis reference fails to disclose or suggest the Applicant's claimed steps or means for performing the steps of:

determining during runtime whether procedural program logic code is available in the executable program memory to provide said required native system services;
and
loading procedural program logic code from said library into the executable program memory during runtime to provide said required native system services in response to the determining step.

Still further, the combination of the Schmidt reference with the Janis reference fails to disclose or suggest the Applicant's additionally claimed steps or means for performing the steps of:

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invoking said object-oriented method of said object-oriented program during runtime following the loading step; and responding by said loaded procedural program logic code to said invoking to cause said procedural operating system to control the computer system to perform said required native system services.

The Applicant's claims are allowable over either the Schmidt reference or the Janis reference, or the combination of the Schmidt reference with the Janis reference.

By the above remarks, the Applicant believes all of the issues raise by the Examiner have been resolved. Accordingly, the Applicant respectfully requests the Examiner's reconsideration of the claims, allow the claims and pass the case to issue.

The Assistant Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this amendment under 37 C.F.R. §§ 1.16 , or credit any overpayment to Deposit Account No. 13-4503, Order No. 3048-7035.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: 12/28/00

By: 

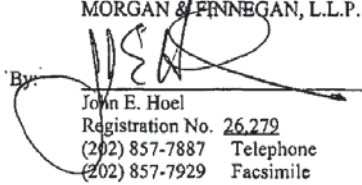
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1775 Eye Street, N.W. Suite 400
Washington, D.C. 20006

- Charge fee to Deposit Account No. 13-4503, Order No. 3048-7035US1. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- The Commissioner is hereby authorized to charge any additional fees which may be required for this amendment, including all fees pursuant to 37 C.F.R. §1.17 for its timely consideration, or credit any overpayment to Deposit Account No. 13-4503, Order No. 3048-7035US1. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- _____ Pages Sequence Listing
- _____ Computer disk(s) containing substitute Sequence Listing
- Statement under 37 C.F.R. §1.825(b) that the computer and paper copies of the substitute Sequence Listing are the same.
- A check in the amount of \$ _____ to cover the filing fee is attached.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: 12/28/00

By: 
John E. Hoel
Registration No. 26,279
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