

United States District Court,
S.D. California.

HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.,
Plaintiff.

v.

GATEWAY, INC,
Defendant.

Gateway, Inc,
Counterclaim-Plaintiff.

v.

Hewlett-Packard Development Company L.P., Hewlett-Packard Company and Compaq Information Technologies Group, L.P,
Counterclaim-Defendants.

Civil No. 04CV0613-B(LSP)

Oct. 14, 2005.

John Allcock, DLA Piper U.S., San Diego, CA, for Plaintiff.

Darryl J. Adams, Dean M. Munyon, James D. Smith, Wayne Harding, Dewey Ballantine, Bryan W. Farney, Dechert LLP, Austin, TX, Jonathan D. Baker, Dechert LLP, Mountain View, CA, for Defendants.

CLAIM CONSTRUCTION ORDER FOR UNITED STATES PATENT NUMBER 5,625,532

RUDI M. BREWSTER, District Judge.

Pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), on October 4, 2005, the Court conducted a *Markman* hearing in the above-titled patent infringement action regarding construction of the disputed claim terms for U.S. Patent Number 5,625,532 ("the '532 patent"). Plaintiff Hewlett-Packard Development Company, L.P. ("HP") was represented by the law firm of DLA Piper Rudnick Gray Gary U.S. LLP, and Defendant Gateway, Inc. ("Gateway") was represented by the law firm of Dewey Ballantine LLP.

At the *Markman* hearing, the Court, with the assistance of the parties, analyzed the claim terms in order to prepare jury instructions interpreting the pertinent claims at issue in the '532 patent. Additionally, the Court prepared a case glossary for terms found in the claims and the specification for the '532 patent considered to be technical in nature which a jury of laypersons might not understand clearly without specific definition.

After careful consideration of the parties' arguments and the applicable statutes and case law, the Court **HEREBY CONSTRUES** the claims in dispute in the '532 patent and **ISSUES** the relevant jury instructions as written in Exhibit A, attached hereto. Further, the Court **HEREBY DEFINES** all pertinent technical

terms as written in Exhibit B, attached hereto.

IT IS SO ORDERED.

EXHIBIT A

UNITED STATES PATENT NUMBER 5,625,532-CLAIM CHART

VERBATIM CLAIM LANGUAGE	COURT'S CONSTRUCTION
<i>Claim 1</i>	
1. Computer keyboard apparatus comprising:	1. Computer keyboard apparatus comprising:
a key pad structure having top and bottom sides;	a key pad structure ^[FN*] [<i>a switch structure to produce electrical signals when associated key caps are depressed</i>] having a top [<i>top surface of the key pad structure</i>] and bottom [<i>bottom surface of the key pad structure</i>] sides ;
a series of key cap members positioned above said top side of said key pad structure and mutually spaced apart from one another in a direction parallel to said top side, each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;	A series of key cap members [<i>manually depressible top portions of the keys</i>] positioned above said top side of said key pad structure and mutually spaced apart from one another [<i>adjacent keys equally spaced apart from one another</i>] in a direction parallel to said top side [<i>on a plane equidistant from the key pad top side</i>], each of said key cap members having bottom side edge periphery [<i>downwardly facing surface of the wall defining an edge of the key cap member</i>] facing said top side of said key pad structure , and an upwardly dished interior portion [<i>upwardly concave interior portion</i>] bounded by said bottom side edge periphery ;
A spaced apart series of individual key support and guide members supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a base wall with a top side and further having a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure, said side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure positioned lower than said top sides of said base walls	A spaced apart series of individual [<i>spaced apart from one another and not joined to one another</i>] key support and guide members [<i>structures to which the linkage means are secured</i>] supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members [<i>aligned to and disposed beneath associated key cap members</i>], each of said key support and guide members having a base wall [<i>structure forming the body portion of the key support and guide members resembling a wall in appearance</i>] with a top side and further having a side edge periphery [<i>the outwardly facing surface of the base wall</i>] spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure [<i>spaced horizontally inwardly of the bottom side edge periphery of its associated key cap member</i>], said side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure positioned lower than said top sides of said base walls of said individual key support and guide members ; [<i>the side edge peripheries of the key support and guide members are spaced apart along the top side area of the key pad</i>

of said individual key support and guide members;	<i>structure, are circumscribed by the top side areas of the key pad structure, and extend downwardly from the top side areas of the key pad structure;</i>
Linking means for securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top side of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent its underlying top side area of said key pad structure and disposed lower than the top side of the base wall of the underlying key support and guide member; and	"Linking means" Function: securing each of said <i>key cap members</i> to its underlying <i>key support and guide member</i> for <i>movement relative thereto, through a key stroke distance</i> [<i>relative movement between key cap members and underlying key support and guide members through a key stroke distance</i>], between an upwardly extended position in which the <i>key cap member</i> is spaced upwardly apart from said <i>top side</i> of said <i>key pad structure</i> , and a downwardly retracted position in which the underlying <i>key support and guide member</i> is upwardly received in the interior of the <i>key cap member</i> with the <i>bottom side edge periphery</i> of the <i>key cap member</i> being <i>adjacent</i> [<i>near or adjoining, with no signal generating structure such as, key cap, scissored linkage assembly, key support and guide member, and key pad structure in between</i>] its underlying <i>top side area</i> of said <i>key pad structure</i> and <i>disposed lower than the top side of the base wall of the underlying key support and guide member</i> [<i>the bottom side edge periphery of the key cap member is positioned lower than the top side of the base wall of the underlying key support and guide member</i>]; and Structure: <i>Scissored linkage assembly</i> , Figures 4 and 5 element 80
Biasing means for resiliently biasing each of said key cap members toward said upwardly extended position thereof.	"Biasing means" Function: <i>resiliently biasing</i> [<i>exerting force through deformation</i>] each of said <i>key cap members</i> toward said upwardly extended position thereof. Structure: The resilient key return dome 48 upwardly engaging the <i>scissored linkage assembly</i> 80 in Figure 2; described at Col 2: 44-49.
Claim 2	
2. The computer keyboard apparatus of claim 1 wherein:	2. The computer keyboard apparatus of claim 1 wherein:
said key pad structure is a multilayer key pad structure having top and bottom layers, and	said <i>key pad structure</i> is a <i>multilayer key pad structure</i> [<i>a switch structure of two or more sheet members to produce electrical signals when associated key caps are depressed</i>] having top and bottom layers, and
said biasing means include a spaced series of resilient key return members aligned with and underlying said key cap members, and projecting upwardly from said top layer.	said biasing means include a spaced series of <i>resilient key return members</i> [<i>structures that recover in shape and size from deformation</i>] aligned with and underlying said <i>key cap members</i> , and projecting upwardly from said top layer.
Claim 3	
3. The computer keyboard apparatus of claim 2 wherein:	3. The computer keyboard apparatus of claim 2 wherein:
said key support and guide members have central openings therein, and	said <i>key support and guide members</i> have central openings therein, and
said resilient key return members are elastomeric dome members projecting	Said <i>resilient key return members</i> are <i>elastomeric dome members</i> [<i>rubber dome shaped member</i>] projecting upwardly through said

upwardly through said central openings.	central openings.
Claim 4	
4. The computer keyboard apparatus of claim 1 wherein:	4. The computer keyboard apparatus of claim 1 wherein:
said linking means include scissored linkage assemblies operatively interconnected between said key cap members and said key support and guide members.	said linking means include <i>scissored linkage assemblies</i> [<i>a first pair of scissored arms and a second pair of scissored arms interconnected by a joining plate</i>] operatively interconnected [<i>movably secured together, to allow the key cap member to move relative to the key support and guide member through a key stroke distance</i>] between said <i>key cap members</i> and said <i>key support and guide members</i> .
Claim 5	
5. The computer keyboard apparatus of claim 1 wherein:	5. The computer keyboard apparatus of claim 1 wherein:
said key support and guide members are supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure.	said <i>key support and guide members</i> are <i>supported</i> [<i>mounted</i>] on said <i>key pad structure</i> by <i>cooperatively engaged locking means</i> on said <i>key support and guide members</i> and said <i>key pad structure</i> . "Cooperatively engaged locking means" Function: to support the <i>key support and guide member</i> on the <i>key pad structure</i> Structure: depending legs 116 formed on the corners of each of the structures 110 and extending downwardly through circular holes 118 that transversely pass through the signal pad structure 44 from the top side 46a of the dome sheet 46 to the top side of the metal backing sheet 62. Lower end portions 116a of the legs 116 (see FIG. 7) are transversely enlarged and snap into upwardly projecting tab pairs 120, 122 on the metal backing sheet 62 to anchor the key support and guide structures 110 in place on the <i>top side</i> of the signal pad structure 44 .
Claim 6	
6. Computer keyboard apparatus comprising:	6. Computer keyboard apparatus comprising:
a key pad structure having top and bottom sides;	a <i>key pad structure</i> having <i>top</i> and <i>bottom sides</i> ;
a series of key cap members positioned above said top side said key pad structure and mutually spaced apart from one another in a direction parallel to said top side, each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;	a series of <i>key cap members</i> positioned above said <i>top side</i> said <i>key pad structure</i> and <i>mutually spaced apart from one another</i> in a <i>direction parallel to said top side</i> , each of said <i>key cap members</i> having a <i>bottom side edge periphery</i> facing said <i>top side</i> of said <i>key pad structure</i> , and an <i>upwardly dished interior portion</i> bounded by said <i>bottom side edge periphery</i> ;
a spaced apart series of key support and guide members supported on said top side of said key pad structure in	<i>a spaced apart series of key support and guide members supported on said top side of said key pad structure</i> [<i>a series of key support and guide members mounted on the top side of the key pad structure</i>

<p>an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a top side and further having a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure;</p>	<p>and spaced apart from one another] in <i>an aligned, underlying relationship with said series of key cap members</i>, each of said <i>key support and guide members</i> having a top side and further having a <i>side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure;</i></p>
<p>linking means for securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top side of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent said top side of said key pad structure; and</p>	<p>Linking means for securing each of said <i>key cap members</i> to its underlying <i>key support and guide member</i> for <i>movement relative thereto, through a key stroke distance</i>, between an upwardly extended position in which the <i>key cap member</i> is spaced upwardly apart from said <i>top side</i> of said <i>key pad structure</i>, and a downwardly retracted position in which the underlying <i>key support and guide member</i> is upwardly received in the interior of the <i>key cap member</i> with the <i>bottom side edge periphery</i> of the <i>key cap member</i> being <i>adjacent</i> said <i>top side</i> of said <i>key pad structure</i>; and</p>
<p>biasing means for resiliently biasing each of said key cap members toward said upwardly extended position thereof,</p>	<p>biasing means for <i>resiliently biasing</i> each of said <i>key cap members</i> toward said upwardly extended position thereof,</p>
<p>said key support and guide members being supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure,</p>	<p>said <i>key support and guide members</i> being <i>supported</i> on said <i>key pad structure</i> by cooperatively engaged locking means on said <i>key support and guide members</i> and said <i>key pad structure</i>,</p>
<p>said key pad structure being a multilayer structure having a top layer and a bottom layer, and a spaced series of holes extending downwardly through said top layer to said bottom layer, and</p>	<p>said <i>key pad structure</i> being a multilayer structure having a top layer and a bottom layer, and a spaced series of holes extending downwardly through said top layer to said bottom layer, and</p>
<p>said cooperatively engaged locking means including a spaced plurality of post members depending from said key support and guide members, extending downwardly through said</p>	<p>said cooperatively engaged locking means including a spaced plurality of post members depending from said <i>key support and guide members</i>, extending downwardly through said holes, and being lockingly received in portions of said bottom layer.</p>

holes, and being lockingly received in portions of said bottom layer.	
Claim 7	
7. The computer keyboard apparatus of claim 6 wherein:	7. The computer keyboard apparatus of claim 6 wherein:
said bottom layer is a metal base plate member having upturned flange portions, and	said bottom layer is a metal base plate member having upturned flange portions, and
said post members have enlarged lower end portions snap-fitted into pairs of said upturned flange portions.	said post members have <i>enlarged lower end portions snap-fitted [end portions that are transversely enlarged and snap fit]</i> into pairs of said upturned flange portions.
Claim 8	
8. Computer keyboard apparatus comprising:	8. Computer keyboard apparatus comprising:
a multilayer key pad structure having top and bottom layers;	a <i>multilayer key pad structure</i> having top and bottom layers;
a series of key cap members positioned above said top layer of said key pad structure and mutually spaced apart from one another in a direction parallel to said top layer, each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;	A series of <i>key cap members</i> positioned above said top layer of said <i>key pad structure</i> and <i>mutually spaced apart from one another</i> in a direction parallel to said top layer, each of said <i>key cap members</i> having a <i>bottom side edge periphery</i> facing said <i>top side</i> of said <i>key pad structure</i> , and an <i>upwardly dished interior portion</i> bounded by said <i>bottom side edge periphery</i> ;
a spaced apart series of individual key support and guide members supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a base wall with a top side, a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top layer of said key pad structure, and a central opening extending therethrough transversely to said top layer, said side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure	A spaced apart series of <i>individual key support and guide members supported</i> on said <i>top side</i> of said <i>key pad structure</i> in an <i>aligned, underlying relationship with said series of key cap members</i> , each of said <i>key support and guide members</i> having a <i>base wall</i> with a top side, a <i>side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top layer of said key pad structure</i> , and a central opening extending therethrough transversely to said top layer, said <i>side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure</i> <i>positioned lower than said top sides of said base walls of said individual key support and guide members</i> ;

<p>positioned lower than said top sides of said base walls of said individual key support and guide members;</p>	
<p>a series of scissored linkage assemblies securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top layer of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent its underlying top side area of said key pad structure and positioned lower than the top side of the base wall of the underlying key support and guide member; and</p>	<p>A series of <i>scissored linkage assemblies</i> securing each of said <i>key cap members</i> to its underlying <i>key support and guide member</i> for <i>movement relative thereto, through a key stroke distance</i>, between an upwardly extended position in which the <i>key cap member</i> is spaced upwardly apart from said top layer of said <i>key pad structure</i>, and a downwardly retracted position in which the underlying <i>key support and guide member</i> is upwardly received in the interior of the <i>key cap member</i> with the <i>bottom side edge periphery</i> of the <i>key cap member</i> being <i>adjacent</i> its underlying <i>top side</i> area of said <i>key pad structure</i> and positioned lower than the top side of the <i>base wall</i> of the underlying <i>key support and guide member</i>; and</p>
<p>a spaced series of resilient key return members secured to said top layer of said key pad structure, extending upwardly through said central openings in said key support and guide members, and upwardly engaging said scissored linkage assemblies in a manner resiliently biasing said key cap members toward said upwardly extended positions thereof.</p>	<p>A spaced series of <i>resilient key return members</i> secured to said top layer of said <i>key pad structure</i>, extending upwardly through said central openings in said <i>key support and guide members</i>, and upwardly engaging said <i>scissored linkage assemblies</i> in a manner <i>resiliently biasing</i> said <i>key cap members</i> toward said upwardly extended positions thereof.</p>
<p>Claim 9</p>	
<p>9. Computer keyboard apparatus comprising:</p>	<p>9. Computer keyboard apparatus comprising:</p>
<p>a multilayer key pad structure having top and bottom layers;</p>	<p>a <i>multilayer key pad structure</i> having top and bottom layers;</p>
<p>a series of key cap members positioned above said top layer of said key pad structure and mutually spaced apart from one another in a direction parallel to said top layer, each of said key cap members having a bottom side edge periphery facing said top</p>	<p>A series of <i>key cap members</i> positioned above said top layer of said <i>key pad structure</i> and <i>mutually spaced apart from one another</i> in a direction parallel to said top layer, each of said <i>key cap members</i> having a <i>bottom side edge periphery</i> facing said <i>top side</i> of said <i>key pad structure</i>, and an <i>upwardly dished interior portion</i> bounded by said <i>bottom side edge periphery</i>;</p>

<p>side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;</p>	
<p>a spaced apart series of key support and guide members supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a top side, a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top layer of said key pad structure, and a central opening extending therethrough transversely to said top layer;</p>	<p><i>A spaced apart series of key support and guide members supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a top side, a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top layer of said key pad structure, and a central opening extending therethrough transversely to said top layer;</i></p>
<p>a series of scissored linkage assemblies securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top layer of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent said top side of said key pad structure; and</p>	<p><i>A series of scissored linkage assemblies securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top layer of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent said top side of said key pad structure; and</i></p>
<p>a spaced series of resilient key return members secured to said top layer of said key pad structure, extending upwardly through said central openings in said key support and guide members, and upwardly engaging said scissored linkage assemblies in a manner resiliently biasing said key cap members toward said upwardly extended positions thereof,</p>	<p><i>A spaced series of resilient key return members secured to said top layer of said key pad structure, extending upwardly through said central openings in said key support and guide members, and upwardly engaging said scissored linkage assemblies in a manner resiliently biasing said key cap members toward said upwardly extended positions thereof,</i></p>

said key pad structure having a spaced series of holes disposed therein and extending downwardly through said top layer to said bottom layer, and	Said key pad structure having a spaced series of holes disposed therein and extending downwardly through said top layer to said bottom layer, and
said key support and guide members being supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure, said cooperatively engaged locking means including a spaced plurality of post members depending from said key support and guide members, extending downwardly through said holes, and being lockingly received in portions of said bottom layer.	said key support and guide members being supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure , said cooperatively engaged locking means including a spaced plurality of post members depending from said key support and guide members , extending downwardly through said holes, and being lockingly received in portions of said bottom layer.
Claim 10	
10. The computer keyboard apparatus of claim 9 wherein:	10. The computer keyboard apparatus of claim 9 wherein:
said bottom layer is a metal base plate member having upturned flange portions, and	said bottom layer is a metal base plate member having upturned flange portions, and
said post members have enlarged lower end portions snap-fitted into pairs of said upturned flange portions.	said post members have enlarged lower end portions snap-fitted into pairs of said upturned flange portions.
Claim 11	
11. A portable computer comprising:	11. A portable computer comprising:
a base housing having a top side;	a base housing having a top side;
a lid housing portion secured to said base housing portion for pivotal movement relative thereto between a closed position in which said lid housing portion extends across and covers said top side, and an open position in which said lid housing portion uncovers and exposes said top side; and	a lid housing portion secured to said base housing portion for pivotal movement relative thereto between a closed position in which said lid housing portion extends across and covers said top side, and an open position in which said lid housing portion uncovers and exposes said top side; and
reduced height keyboard apparatus disposed along said top side and including:	reduced height keyboard [<i>keyboard structure with an overall thickness less than portable computers without the invention, but with a similar operative key stroke distance of the key cap</i>] apparatus disposed along said top side and including:
a key pad structure having top and bottom sides;	a key pad structure having top and bottom sides ;
a series of key cap members positioned above said top side of said	a series of key cap members positioned above said top side of said key pad structure and mutually spaced apart from one another in a

key pad structure and mutually spaced apart from one another in a direction parallel to said top side, each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;

direction parallel to said top side, each of said *key cap members* having a *bottom side edge periphery* facing said *top side* of said *key pad structure*, and an *upwardly dished interior portion* bounded by said *bottom side edge periphery*;

a spaced apart series of individual key support and guide members supported on said top side of said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a base wall with a top side and further having a side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure, said side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure positioned lower than said top sides of said base walls of said individual key support and guide members;

a spaced apart series of *individual key support and guide members supported* on said *top side* of said *key pad structure* in an *aligned, underlying relationship with said series of key cap members*, each of said *key support and guide members* having a *base wall* with a top side and further having a *side edge periphery spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure*, said *side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure positioned lower than said top sides of said base walls of said individual key support and guide members*;

linking means for securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top side of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent its underlying top side area of said

linking means for securing each of said *key cap members* to its underlying *key support and guide member* for *movement relative thereto, through a key stroke distance*, between an upwardly extended position in which the *key cap member* is spaced upwardly apart from said *top side* of said *key pad structure*, and a downwardly retracted position in which the underlying *key support and guide member* is upwardly received in the interior of the *key cap member* with the *bottom side edge periphery* of the *key cap member* being *adjacent* its underlying *top side* area of said *key pad structure* and *disposed lower than the top side of the base wall of the underlying key support and guide member*; and

key pad structure and disposed lower than the top side of the base wall of the underlying key support and guide member; and	
biasing means for resiliently biasing each of said key cap members toward said upwardly extended position thereof.	biasing means for <i>resiliently biasing</i> each of said <i>key cap members</i> toward said upwardly extended position thereof.
Claim 12	
12. The portable computer of claim 11 wherein said portable computer is a notebook computer.	12. The portable computer of claim 11 wherein said portable computer is a notebook computer.
Claim 13	
13. The portable computer of claim 11 wherein:	13. The portable computer of claim 11 wherein:
said key pad structure is a multilayer key pad structure having top and bottom layers, and	said <i>key pad structure</i> is a <i>multilayer key pad structure</i> having top and bottom layers, and
said biasing means include a spaced series of resilient key return members aligned with and underlying said key cap members, and projecting upwardly from said top layer.	said biasing means include a spaced series of <i>resilient key return members</i> aligned with and underlying said <i>key cap members</i> , and projecting upwardly from said top layer.
Claim 14	
14. The portable computer of claim 13 wherein:	14. The portable computer of claim 13 wherein:
said key support and guide members have central openings therein, and	said <i>key support and guide members</i> have central openings therein, and
said resilient key return members are elastomeric dome members projecting upwardly through said central openings.	said <i>resilient key return members</i> are <i>elastomeric dome members</i> projecting upwardly through said central openings.
Claim 15	
15. The portable computer of claim 11 wherein:	15. The portable computer of claim 11 wherein:
said linking means include scissored linkage assemblies operatively interconnected between said key cap members and said key support and guide members.	said linking means include <i>scissored linkage assemblies operatively interconnected</i> between said <i>key cap members</i> and said <i>key support and guide members</i> .
Claim 16	
16. The portable computer of claim 11 wherein:	16. The portable computer of claim 11 wherein:
said key support and guide members are supported on said key pad structure by cooperatively engaged	said <i>key support and guide members</i> are <i>supported</i> on said <i>key pad structure</i> by cooperatively engaged locking means on said <i>key support and guide members</i> and said <i>key pad structure</i> .

locking means on said key support and guide members and said key pad structure.	
Claim 17	
17. A portable computer comprising:	17. A portable computer comprising:
a base housing having a top side;	a base housing having a top side;
a lid housing portion secured to said base housing portion for pivotal movement relative thereto between a closed position in which said lid housing portion extends across and covers said top side, and an open position in which said lid housing portion uncovers and exposes said top side; and	a lid housing portion secured to said base housing portion for pivotal movement relative thereto between a closed position in which said lid housing portion extends across and covers said top side, and an open position in which said lid housing portion uncovers and exposes said top side; and
reduced height keyboard apparatus disposed along said top side and including:	reduced height keyboard apparatus disposed along said top side and including:
a key pad structure having top and bottom sides;	a key pad structure having top and bottom sides ;
a series of key cap members positioned above said top side of said key pad structure and mutually spaced apart from one another in a direction parallel to said top side, each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure, and an upwardly dished interior portion bounded by said bottom side edge periphery;	a series of key cap members positioned above said top side of said key pad structure and mutually spaced apart from one another in a direction parallel to said top side , each of said key cap members having a bottom side edge periphery facing said top side of said key pad structure , and an upwardly dished interior portion bounded by said bottom side edge periphery ;
a spaced apart series of key support and guide members supported on said top side or said key pad structure in an aligned, underlying relationship with said series of key cap members, each of said key support and guide members having a top side and further having a side edge periphery spaced inwardly of the bottom side edge periphery of its associated keycap member in a direction parallel to said top side of said key pad structure;	a spaced apart series of key support and guide members supported on said top side or said key pad structure in an aligned, underlying relationship with said series of key cap members , each of said key support and guide members having a top side and further having a side edge periphery spaced inwardly of the bottom side edge periphery of its associated keycap member in a direction parallel to said top side of said key pad structure ;
linking means for securing each of said key cap members to its underlying key support and guide member for movement relative	linking means for securing each of said key cap members to its underlying key support and guide member for movement relative thereto, through a key stroke distance , between an upwardly extended position in which the key cap member is spaced upwardly

thereto, through a key stroke distance, between an upwardly extended position in which the key cap member is spaced upwardly apart from said top side of said key pad structure, and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent said top side of said key pad structure; and	apart from said top side of said keypad structure , and a downwardly retracted position in which the underlying key support and guide member is upwardly received in the interior of the key cap member with the bottom side edge periphery of the key cap member being adjacent said top side of said key pad structure ; and
biasing means for resiliently biasing each of said key cap members toward said upwardly extended position thereof,	biasing means for resiliently biasing each of said key cap members toward said upwardly extended position thereof,
said key support and guide members being supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure,	said key support and guide members being supported on said key pad structure by cooperatively engaged locking means on said key support and guide members and said key pad structure ,
said key pad structure being a multilayer structure having a top layer and a bottom layer, and a spaced series of holes extending downwardly through said top layer to said bottom layer, and	said key pad structure being a multilayer structure having a top layer and a bottom layer, and a spaced series of holes extending downwardly through said top layer to said bottom layer, and
said cooperatively engaged locking means including a spaced plurality of post members depending from said key support and guide members, extending downwardly through said holes, and being lockingly received in portions of said bottom layer.	said cooperatively engaged locking means including a spaced plurality of post members depending from said key support and guide members , extending downwardly through said holes, and being lockingly received in portions of said bottom layer.
Claim 18	
18. The portable computer of claim 17 wherein:	18. The portable computer of claim 17 wherein:
said bottom layer is a metal base plate member having upturned flange portions, and	said bottom layer is a metal base plate member having upturned flange portions, and
said post members have enlarged lower end portions snap-fitted into pairs of said upturned flange portions.	said post members have enlarged lower end portions snap-fitted into pairs of said upturned flange portions.

EXHIBIT B

UNITED STATES PATENT NUMBER 5.625.532-GLOSSARY OF TERMS

TERM	DEFINITION
A spaced apart series of key support and guide members supported on said top side of said key pad structure	a series of key support and guide members mounted on the top side of the key pad structure and spaced apart from one another
Adjacent	near or adjoining, with no signal generating structure such as, key cap, scissored linkage assembly, key support and guide member, and key pad structure in between
An aligned, underlying relationship with said series of key cap members	aligned to and disposed beneath associated key cap members
Base wall(s)	structure forming the body portion of the key support and guide members resembling a wall in appearance
Bottom side edge periphery	downwardly facing surface of the wall defining an edge of the key cap member
Bottom side	bottom surface of the key pad structure
Direction parallel to said top side	on a plane equidistant from the key pad top side
Disposed lower than the top side of the base wall of the underlying key support and guide member	the bottom side edge periphery of the key cap member is positioned lower than the top side of the base wall of the underlying key support and guide member
Elastomeric dome members	rubber dome shaped member
Enlarged lower end portions snap-fitted	end portions that are transversely enlarged and snap fit
Individual	spaced apart from one another and not joined to one another
Key pad structure	a switch structure to produce electrical signals when associated key caps are depressed
Key cap member(s)	manually depressible top portion(s) of the key(s)
Key support and guide member(s)	structures to which the linkage means or assemblies are secured
Movement relative thereto, through a key stroke distance	relative movement between key cap members and underlying key support and guide members through a key stroke distance
Multilayer key pad structure	a switch structure of two or more sheet members to produce electrical signals when associated key caps are depressed
Mutually spaced apart from one another	adjacent keys equally spaced apart from one another
Operatively interconnected	movably secured together, to allow the key cap member to move relative to the key support and guide member through a key stroke distance
Reduced height keyboard	keyboard structure with an overall thickness less than portable computers without the invention, but with similar operative key stroke distance of the key cap
Resilient key return members	structures that recover in shape and size from deformation

Resiliently biasing

Scissored linkage assemblies

Side edge periphery

Side edge peripheries of said individual key support and guide members being spaced apart along, circumscribed by, and extending downwardly to top side areas of said key pad structure positioned lower than said top sides of said base walls of said individual key support and guide members

Spaced inwardly of the bottom side edge periphery of its associated key cap member in a direction parallel to said top side of said key pad structure

Supported

Top side

Upwardly dished interior portion

exerting force through deformation

a first pair of scissored arms and a second pair of scissored arms interconnected by a joining plate

the outwardly facing surface of the base wall

the side edge peripheries of the key support and guide members are spaced apart along the top side area of the key pad structure, are circumscribed by the top side areas of the key pad structure, and extend downwardly from the top side areas of the key pad structure; the top side area of the key pad structure is positioned lower than the top side of the base wall of the key support and guide members.

spaced horizontally inwardly of the bottom side edge periphery of its associated key cap member

mounted

top surface of the key pad structure

upwardly concave interior portion

FN* All terms appearing in bold face type and underlined have been construed by the court and appear with their definitions in the glossary in Exhibit B, The definition for each construed term appears in italics after its first use in the patent.

S.D.Cal.,2005.

Hewlett-Packard Development Co., L.P. v. Gateway, Inc.

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