

12-10-2001



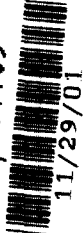
Altera Docket No. 796.420-US-W1

Form PTO 1595

101910785
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

<p>1. Name of conveying party(ies)</p> <p>Matti Tikkanen Jukka-Pekka Iivonen</p> <p><i>11/29/01</i></p> <p>Additional names(s) of conveying party(ies) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies):</p> <p>Nokia Corporation Keilalahdentie 4 FIN-02150 Espoo FINLAND</p> <p>Additional name(s) & addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">11046 U.S. PTO 09/997769 11/29/01</p> 
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3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other

Execution Date: Nov. 7, 2001 and Nov. 11, 2001

4. Application number(s) or patent number(s)

If this document is being filed together with a new application, the execution date of the application is: Nov. 7, 2001

A. Patent Application Number(s)	Patent Number(s)
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Additional numbers attached? Yes No

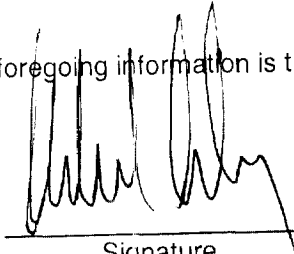
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: Michael B. Lasky Address: Altera Law Group 6500 City West Parkway – Suite 100 Minneapolis, Minnesota 55344-7701</p>	<p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 C.F.R. §3.41) \$40.00 <input checked="" type="checkbox"/> Enclosed – Any excess or insufficiency should be credited or debited to deposit account <input type="checkbox"/> Authorized to charged to deposit account</p> <p>8. Deposit Account number: 50-1038</p>
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9. Statement and Signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael B. Lasky
Name of Person Signing


Signature

November 29, 2001
Date

Total number of pages including cover sheet, attachments, and document: 4

12/07/2001 6TOM11 00000147 09997769

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PATENT
REEL: 012344 FRAME: 0014

PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS,

1. Matti Tikkanen residing at Jahtimestarintie 18, FIN-02940 Espoo, Finland and a citizen of Finland;
2. Jukka-Pekka Iivonen residing at Franzeninkatu 3 B 58, FIN-00500 Helsinki, Finland and a citizen of Finland;

hereafter referred to as "THE UNDERSIGNED", have made an invention entitled
MEMORY BASED ON A DIGITAL TRIE STRUCTURE

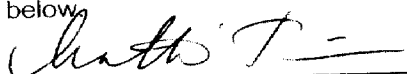
AND, WHEREAS, Nokia Corporation, hereafter referred to as ASSIGNEE, a corporation organized under the laws of Finland and whose place of business and business address is Keilalahdentie 4, FIN-02150 Espoo, Finland, is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFOR, in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sell, assign and transfer unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorize the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said Assignee its successors and assignees, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below



Matti Tikkanen

Nov 7, 2001

Date

Jukka-Pekka Iivonen

Date

No Legalization Required

PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

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2. Jukka-Pekka Iivonen residing at Franzeninkatu 3 B 58, FIN-00500 Helsinki, Finland and a citizen of Finland;

hereafter referred to as "THE UNDERSIGNED", have made an invention entitled
MEMORY BASED ON A DIGITAL TRIE STRUCTURE

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THE UNDERSIGNED, hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said Assignee its successors and assignees, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.

Matti Tikkanen

Date



Jukka-Pekka Iivonen

Nov 11, 2001

Date

No Legalization Required