PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Stefan Halen	07/17/2009
Ola Jeppsson	07/17/2009
Edgar Dullni	07/22/2009
Hans Begge	07/22/2009

RECEIVING PARTY DATA

Name:	ABB Research Ltd.
Street Address:	Affolternstrasse 44
City:	CH-8050 Zurich
State/Country:	SWITZERLAND

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12533659

CORRESPONDENCE DATA

Fax Number: (203)327-1096

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 203-324-6155

Email: ccobb@ssjr.com

Correspondent Name: Wesley W. Whitmyo

Correspondent Name: Wesley W. Whitmyer, Jr.

Address Line 1: 986 Bedford Street

Address Line 2: St. Onge Steward Johnston & Reens LLC

Address Line 4: Stamford, CONNECTICUT 06905

ATTORNEY DOCKET NUMBER: 04189-P0019A

NAME OF SUBMITTER: Wesley W. Whitmyer, Jr.

Total Attachments: 5

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PATENT REEL: 023183 FRAME: 0500 F \$40.00 1253365

PATENT

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> PATENT REEL: 023183 FRAME: 0501

<u>Assignment</u>

WHEREAS, We, the undersigned inventors, have made certain inventions or discoveries (or both) as set forth in an application for Letters Patent of the United States of America, entitled Switching Device, Use Thereof And A Method For Switching, bearing U.S. Patent Application No. 12/533,659 and filed on July 31, 2009;

WHEREAS, ABB Research Ltd., a company organized and existing under the laws of Switzerland, and having an office and place of business at Affolternstrasse 44; CH-8050 Zurich, Switzerland, and, together with its successors and assigns is hereinafter called "Assignee", and is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

NOW THEREFORE, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in any and all countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise:
- 3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patents to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by

PATENT REEL: 023183 FRAME: 0502 Page 2

04189-P0019A

Assignment

Applicants: Stefan Halen, et al.

Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents, including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns, which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN WITNESS WHEREOF, we, Stefan Halen, Ola Jeppsson, Edgar Dullni, and Hans Begge, have hereunto set our hands and affixed our seals.

Data

Stefan Halen

Färgkullagatan 12

S-722 25 Västerås, Sweden

Declaration of Witness

I declare that I was personally present and did see Stefan Halen, who is personally known to me to be the person named in this assignment, duly sign and execute the same.

Declared at

Signature φf Witness

Name of Witness

PATENT REEL: 023183 FRAME: 0503 Page 3
Assignment
Applicants: Stefan Halen, et al.

04189-P0019A

2009-07-17

Date

Ola Jeppsson

Dybecksgatan 10 C

S-722 22 Västerås, Sweden

Declaration of Witness

I declare that I was personally present and did see Ola Jeppsson, who is personally known to me to be the person named in this assignment, duly sign and execute the same.

Declared at

Signature of Witness

Name of Witness

PATENT

REEL: 023183 FRAME: 0504

Page 4
Assignment
Applicants: Stefan Halen, et al.

04189-P0019A

22.07.2009

Date

Edgar Dullni Holunderweg 27 D-40880 Ratingen, Germany

Declaration of Witness

I declare that I was personally present and did see Edgar Dullni, who is personally known to me to be the person named in this assignment, duly sign and execute the same.

Declared at Kathygen on 22 07, 2008

Signature of Witness

Name of Witness

PATENT

REEL: 023183 FRAME: 0505

Page 5 Assignment

Applicants: Stefan Halen, et al.

04189-P0019A

22.07.2009

Date

RECORDED: 09/02/2009

Hans Begge

Jägerstrasse 5

D-42117 Wuppertal, Germany

Declaration of Witness

I declare that I was personally present and did see Hans Begge, who is personally known to me to be the person named in this assignment, duly sign and execute the same.

Declared at Rolling

Signature of Witness

Name of Witness

PATENT

REEL: 023183 FRAME: 0506