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Washington, D.C. 20231

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JOINT

(BEFORE APPLICATION FILED)

## ASSIGNMENT OF PATENT RIGHTS FOR THE UNITED STATES

FOR VALUE RECEIVED, WE, Kato Shigeki and Hidejiro Kadowaki

hereby sell, assign, transfer and convey unto CANON KABUSHIKI KAISHA

a corporation of Japan

having a place of business at

3-30-2, Shimomaruko, Ohta-ku, Tokyo, Japan

its successors, assigns and legal representatives (hereinafter called the "Assignee"), the entire right, title and interest, for the United States, in and to certain inventions relating to

## MOVEMENT-DIRECTION DETERMINATION APPARATUS

RECORDED: 01/06/2004

and described in an application for Letters Patent of the United States executed by each of us, respectively, on the date indicated below and in and to said application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted, thereon, and all reissues and extensions thereof; and we hereby authorize and request the Commissioner for Patents and Trademarks of the United States to issue all Letters Patent upon said inventions to the Assignee or to such nominees as it may designate.

AND we authorize and empower the said Assignee or nominees to invoke and claim for any application for patent or other form of protection for said inventions, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from us.

AND we hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in the United States for any purpose and more particularly in proof of the right of said Assignee or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

AND we hereby covenant that we have the full right to convey the entire right, title and interest herein assigned and that we have not executed and will not execute any agreement in conflict herewith.

AND we hereby covenant and agree that we will communicate to said Assignee or nominees all facts known to us pertaining to said inventions, and testify in all legal proceedings, sign all lawful papers, execute all continuing and reissue applications, make all rightful oaths and declarations and in general perform all lawful acts necessary or proper to aid said Assignee or nominees in obtaining, maintaining and enforcing all lawful patent protection for said inventions in the United States.

By: Kato Shigeki	Date: December 24, 2003
By: Midejino Kadowaki Hidejiro Kadowaki	Date: December 24. 2003
Ву:	Date:

PATENT REEL: 014882 FRAME: 0830