Lawsuit at issue

●Pony Corp. (”P”)

Patentee of a patent regarding an invention with the title of “Position Detector” (the “Present Invention”)

*Patent Number: 202111020

*Date of Application: Apr. 16, 2006

*Date of Registration: Jan. 26, 2008

●Donkey Corp. (“D”)

Company that manufactures and sells position detectors with the product name “D-Pointer” (the “Defendant’s Position Detector(s)” and replaceable styluses (the “Defendant’s Stylus(es)”)

*started manufacturing and selling the Defendant’s Position Detectors and the Defendant’s Styluses on Apr. 1, 2020

P filed a patent infringement lawsuit against D on Aug. 17, 2020, seeking:

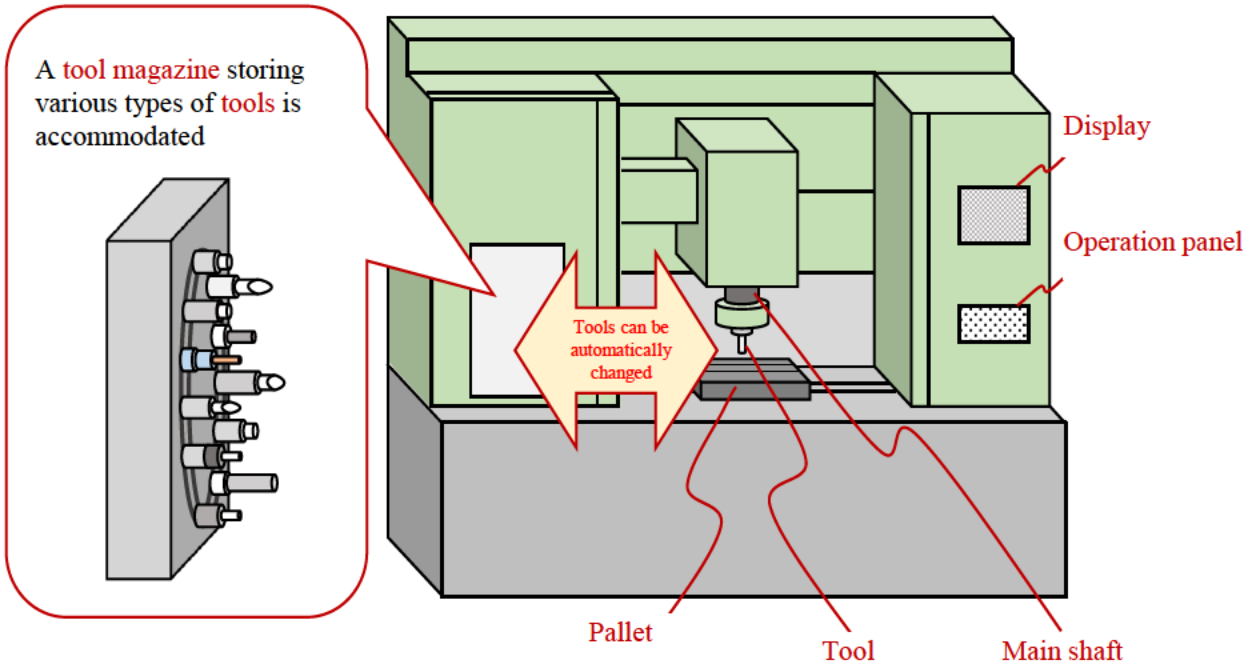
*injunction against the manufacture and sale of the Defendant’s Position Detectors

*injunction against the manufacture and sale of the Defendant’s Styluses

What is a position detector ? (1)

“Machining center”

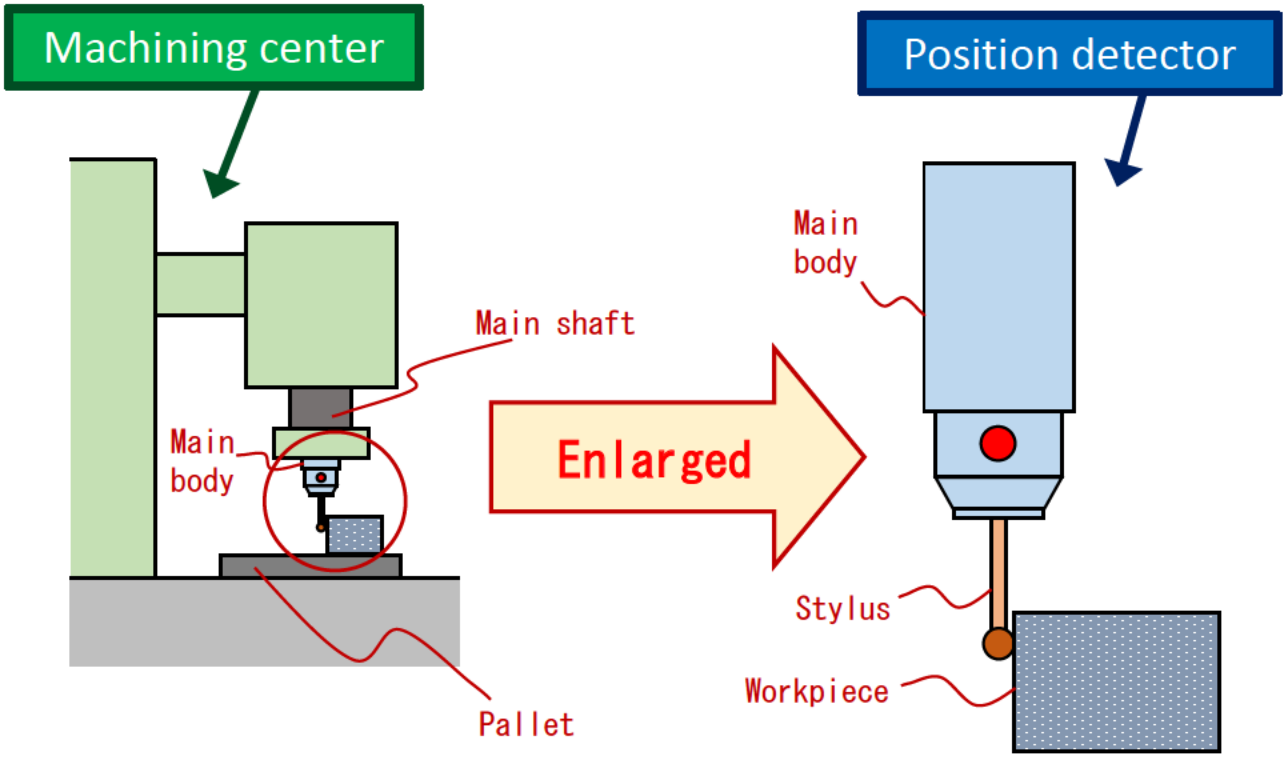
A machining center is a machine tool that has an automatic tool changer enabling automatic change of tools and is equipped with a numerical controller. With a numerical control program, it can continuously perform various machining by automatically taking out the necessary tools from the tool magazine where various kinds of tools are stored, and setting them on the main shaft of the machining center.



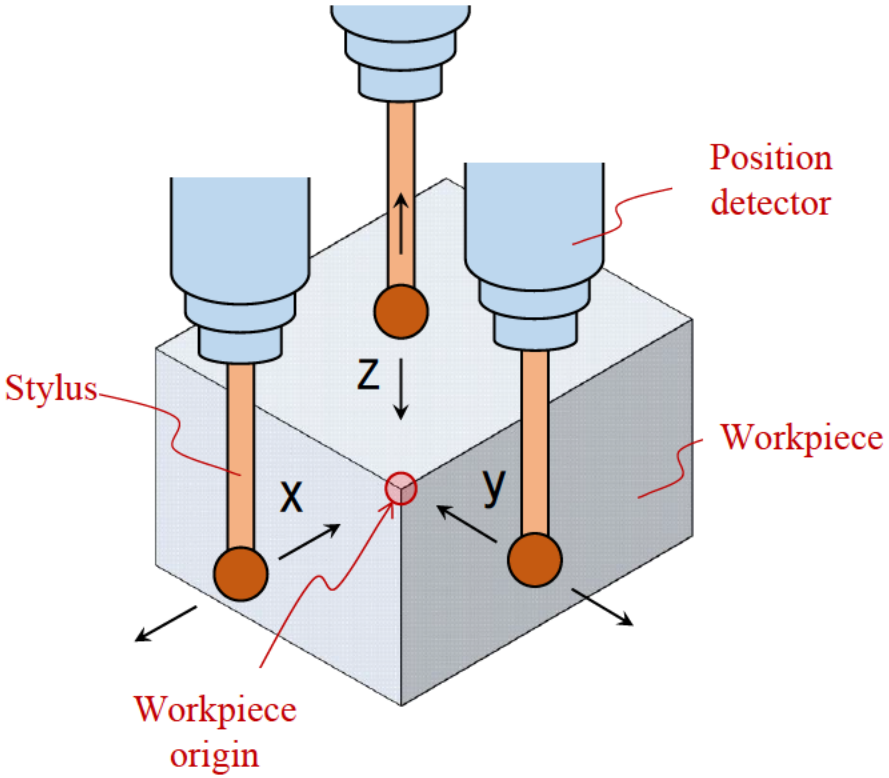
What is a position detector? (2)

“Position detector”

A position detector determines a machining position of a workpiece and measures dimensions of workpiece after machining. It is useful for realizing high-precision machining and preventing machine defects.



What is a position detector? (3)



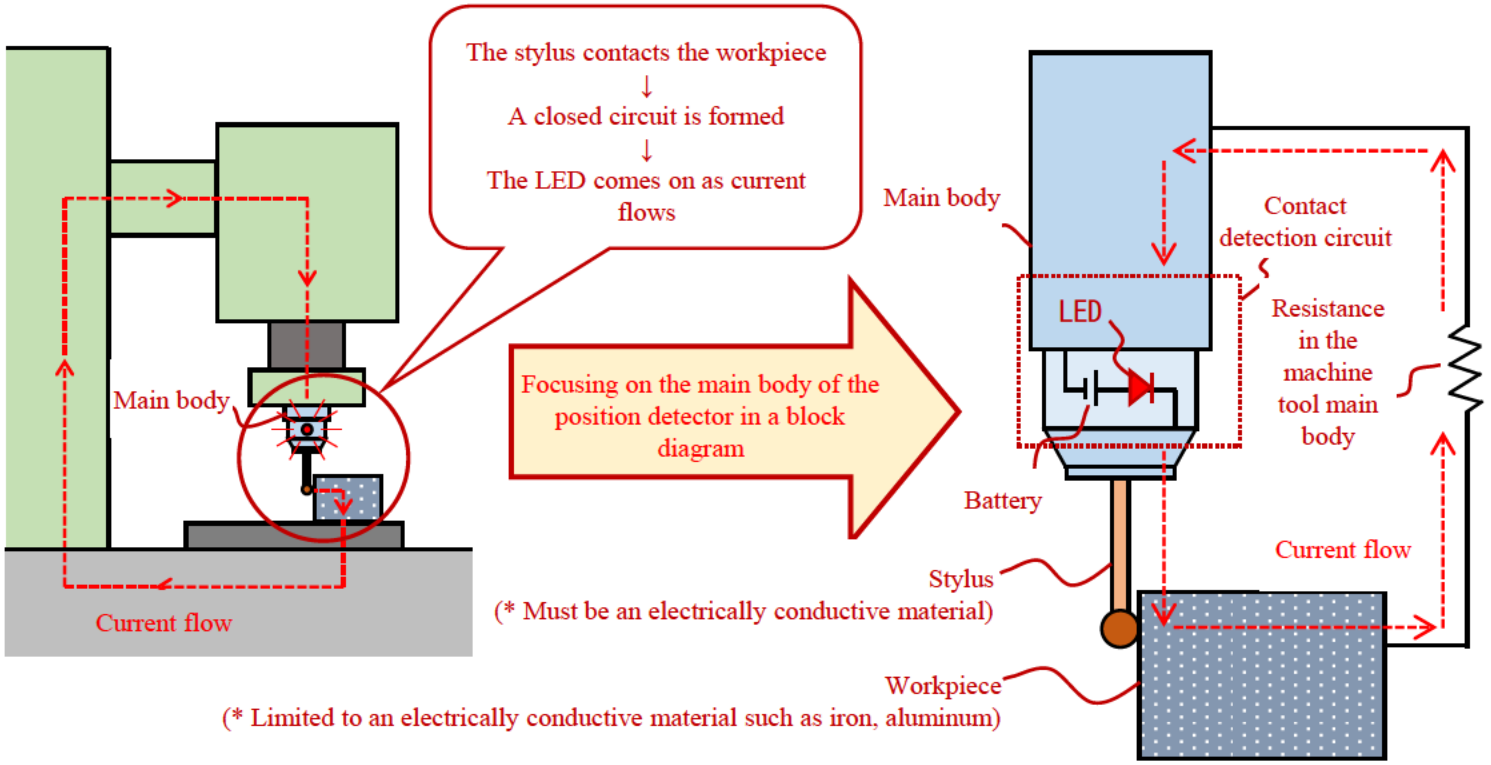
Setting a corner of a workpiece as the workpiece origin using a position detector to indicate the positions of the tool, workpiece and other objects in coordinate values

Creating a machining program that defines necessary matters like the movement path of the cutting tool using the coordinate values based on the workpiece origin

Measuring whether the product after machining has the shape and dimensions as set in the machining program by using the position detector

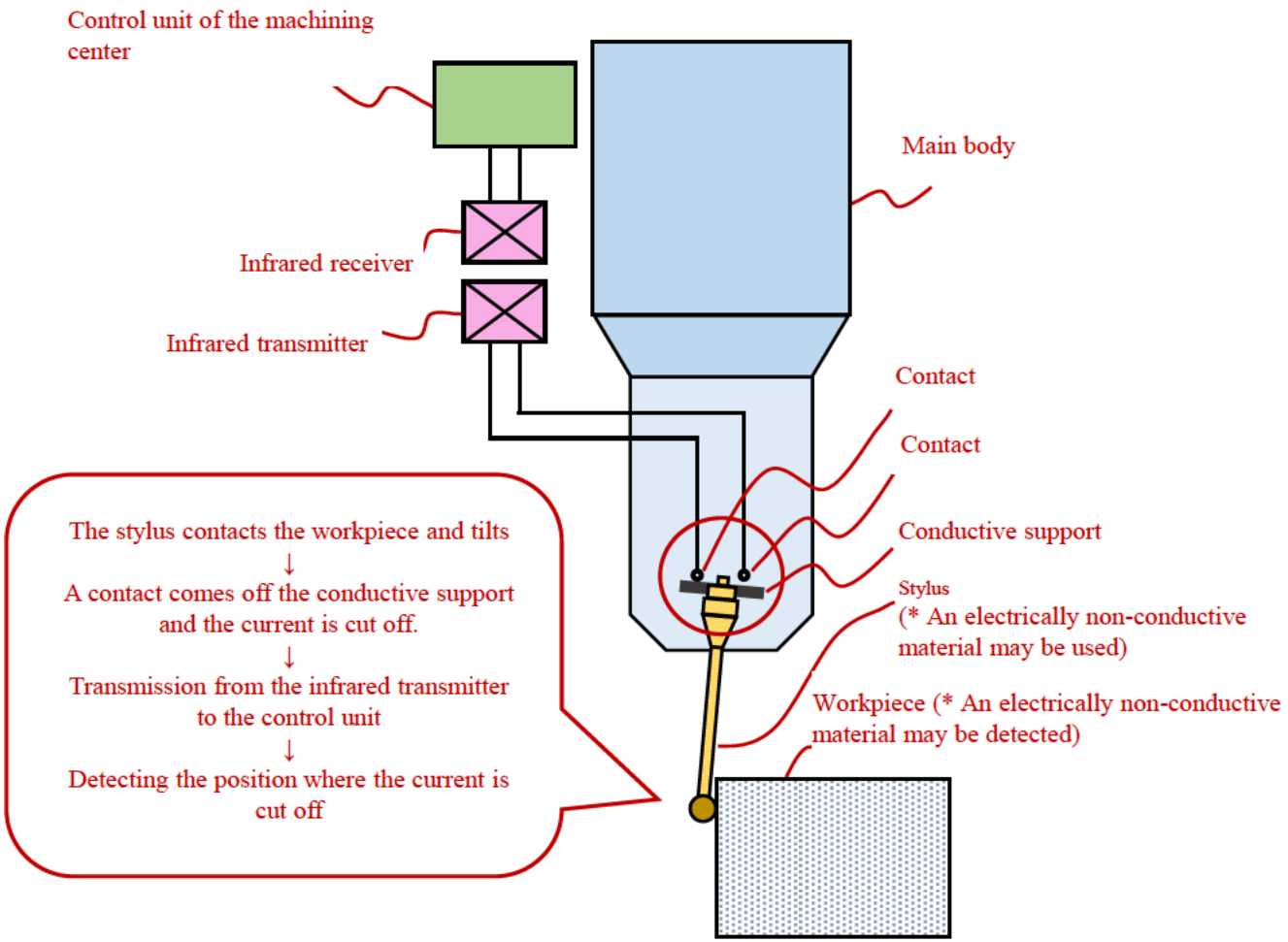
What is a position detector? (4)

“Energized type (External contact type)”



What is a position detector? (5)

“Internal contact type”



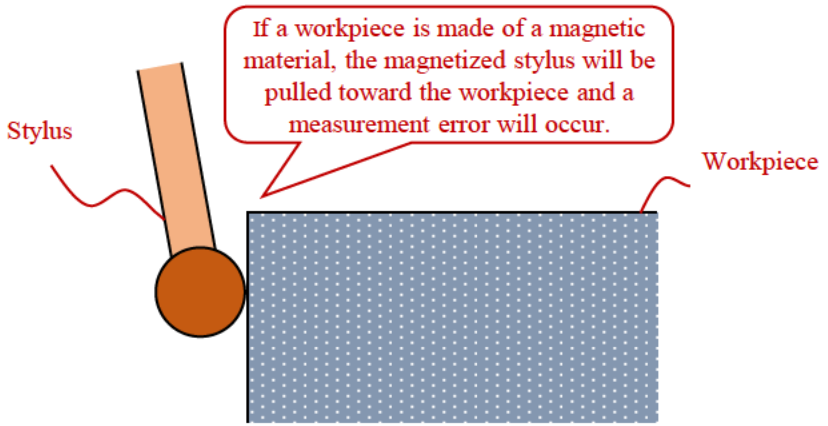
Problem of the prior art/Purpose of the Present Invention

Problem:

Magnetization of the stylus causes a measurement error because the stylus in the shape of an elongated needle slightly tilts by magnetic force.

As to the energized type position detector, a stylus may gradually be magnetized as energized and non-energized states are alternately repeated.

Non-magnetic metal materials generally have low hardness, and wear and deformation of the contacting portion at the end of the stylus cause a measurement error.



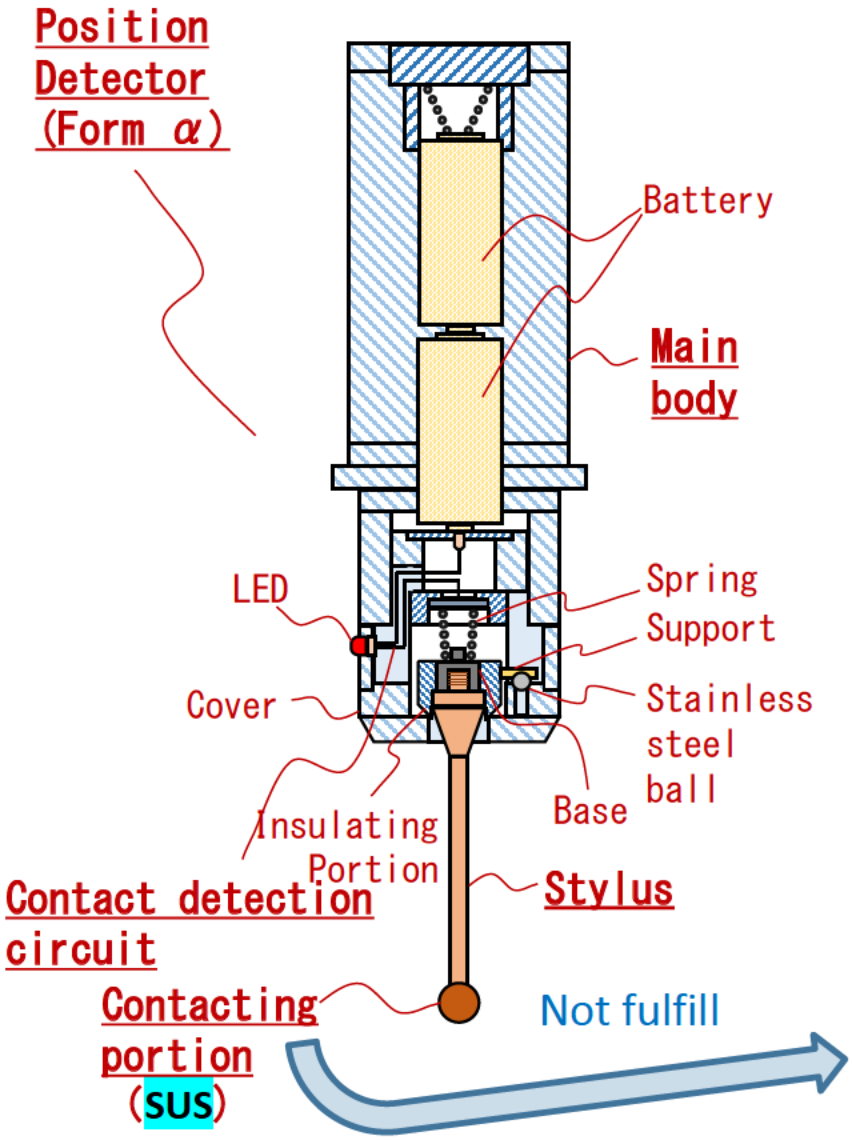
Scope of Claims

A position detector comprising:

A **a micro-movable stylus held in a predetermined stable position in an electrically insulated state; and**
a main body including a contact detection circuit connected to the stylus,
wherein contact between the stylus and a workpiece is electrically detected as a result of formation of a closed circuit including the contact detection circuit via the workpiece when a contacting portion of the stylus contacts the workpiece, and

B **wherein the contacting portion of the stylus is made of a non-magnetic material containing tungsten carbide and a nickel binder.**

Outline of the Defendant's Position Detector (1)



A position detector comprising:

A a micro-movable stylus held in a predetermined stable position in an electrically insulated state; and,

a main body including a contact detection circuit connected to the stylus,

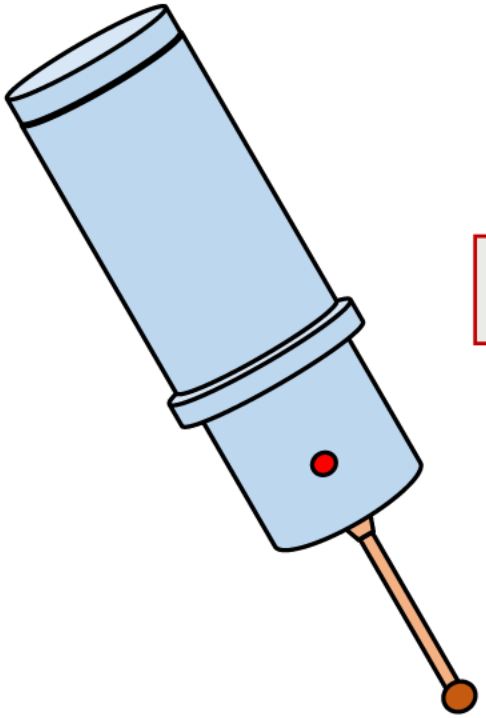
wherein contact between the stylus and a workpiece is electrically detected as a result of formation of a closed circuit including the contact detection circuit via the workpiece when a contacting portion of the stylus contacts the workpiece, and

B wherein the contacting portion of the stylus is made of a non-magnetic material containing tungsten carbide and a nickel binder.

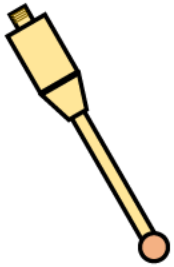
Outline of the Defendant's Position Detector (2)

Defendant's Position Detector (Form α)
(D-Pointer (Energized type) + Standard Stylus)

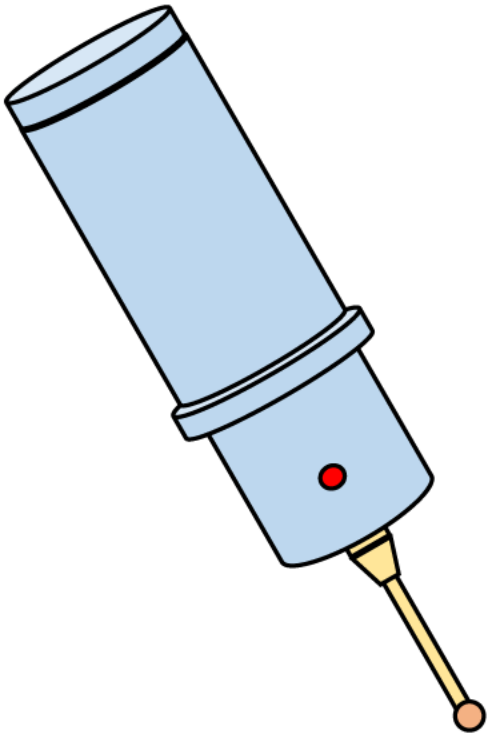
Defendant's Position Detector (Form β)
(D-pointer (Energized type) + Defendant's Stylus)



The Standard Stylus can be replaced with the Defendant's Stylus.

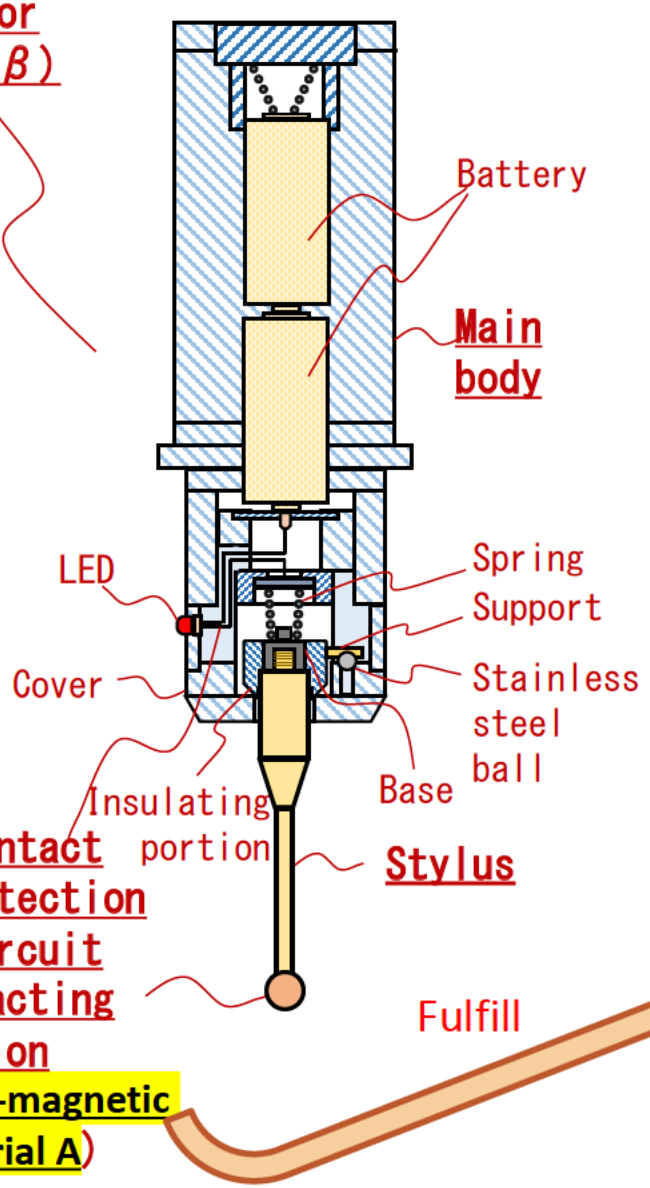


Defendant's Stylus



Outline of the Defendant's Position Detector (3)

Position detector (Form β)



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A a micro-movable stylus held in a predetermined stable position in an electrically insulated state; and

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wherein contact between the stylus and a workpiece is electrically detected as a result of formation of a closed circuit including the contact detection circuit via the workpiece when a contacting portion of the stylus contacts the workpiece, and

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