Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

<appendix>

Measurement Act (extract)

Regulations under the Patent Act Article 3
Where any quantity of the state of physical phenomena prescribed in Act 2 Paragraph 1 of the Measurements Standards Law (Law No. 51, 1992) is to be stated in a document submitted, it shall be stated in accordance with the provisions of Article 8 of the Act as well as Act 3, 4, 5, 6 and 8 (1) and (3) of the Supplementary Provisions of the Law.

Extract from the Measurement Act (Law No. 51, 1992)

Article 2
The term "measurement" as used in this Act shall mean to measure the following items hereinafter referred to as the "quantity of the state of physical (phenomena" and the term "measurement units" shall mean the standards for) measurement:
(i) Length, mass, time, electric current, temperature, amount of substance, luminous intensity, angle, solid angle, area, volume, angular velocity, angular acceleration, velocity, acceleration, frequency, rotational frequency, wave number, density, force, moment of force, pressure, stress, viscosity, kinematic viscosity, work, power, mass flow rate, flow rate, quantity of heat, thermal conductivity, specific heat capacity, entropy, quantity of electricity, electric field strength, voltage, electromotive force, capacitance, magnetic field strength, magnetomotive force, magnetic flux density, magnetic flux, inductance, electric resistance, electric conductance, impedance, active power, reactive power, apparent power, active energy, reactive energy, apparent energy, attenuation of electromagnetic wave, electric power density of electromagnetic wave, radiant intensity, luminous flux, luminance, illuminance, sound power, sound pressure level, oscillating acceleration level, concentration, neutron emission rate, radioactivity, absorbed dose, absorbed dose rate, kerma, kerma rate, exposure, exposure rate, dose equivalent or dose equivalent rate. (ii) Fineness, specific gravity and others prescribed by Cabinet Order.

Article 3
The measurement units of the quantities of the state of physical phenomena listed in the left column of appended table 1 among the quantities of the state of the physical phenomena listed in paragraph 1, item 1 of the preceding Article shall be those listed in the right column of the same table and the definition of each of those units shall be prescribed by Cabinet Order in accordance with resolutions of the General Conference on Weights and Measures and other international decisions and practices with regard to measurement units.

Article 4
(1) In addition to the measurement units prescribed in the preceding Article, the measurement units of the quantities of the state of the physical phenomena listed in the left column of appended table 2 shall be those listed in the right column of

the same table and the definition of each of those measurement units shall be prescribed by Cabinet Order.
(2) In addition to the measurement units prescribed in the preceding Article, the measurement units of the quantities of the state of the physical phenomena listed in the left column of appended table 3 shall be those listed in the right column of the same table and the definition of each of those measurement units shall be prescribed by Cabinet Order.

Article 5
(1) In addition to the measurement units prescribed in Article 3 and Article 4, measurement units of their decimal-multiples and sub-multiples and their definitions shall be prescribed by Cabinet Order.
(2) In addition to the measurement units prescribed in Article 3, Article 4 and the preceding paragraph, the measurement units for length measurements at the sea level as well as the measurement units of length, mass, angle, area, volume, velocity, acceleration, pressure, and quantity of heat used for special measurements specified by Cabinet Order shall be prescribed by Cabinet Order.

Article 8
Measurement units other than the measurement units prescribed in Article 3 through Article 5 the measurement units prescribed in Article 3 through Article 5 (shall be hereinafter referred to as "statutory measurement units" and all other measurement units shall be hereinafter referred to as "non-statutory measurement units" shall not be used for transactions or certifications pertaining to quantities) of the state of the physical phenomena listed in Article 2, paragraph 1, item 1.

Annexed Table I (Article 3 Related)

Quantity of State of Physical Phenomena	Measuring Unit
length	meter
mass	kilogram, gram, ton
time	second, minute, hour
electric current	ampere
temperature	Kelvin, Celsius degree or degree
amount of substance	mole
luminous intensity	candela
angle	radian, degree, second, minute
solid angle	steradian
area	square meter
volume	cubic meter, liter
angular velocity	radian per second
angular acceleration	radian per second squared
velocity	meter per second, meter per hour
acceleration	meter per second squared
frequency	hertz
speed of revolution	per second, per minute, per hour
wave number	per meter
density	kilogram per cubic meter, gram per cubic meter, gram per liter

force	newton
moment of force	newton meter
pressure	pascal or newton per square, bar
stress	pascal or newton per square meter
viscosity	pascal second or newton second per square meter
kinematic viscosity	square meter per second
work	joule or watt second, watt hour
power	watt
mass flow rate	kilogram per second, kilogram per minute, kilogram per hour, gram per second, gram per minute, gram per hour, ton per second, ton per minute, ton per hour
flow rate	cubic meter per second, cubic meter per minute, cubic meter per hour, liter per second, liter per minute, liter per hour
amount of heat	joule or watt second, watt hour
thermal conductivity	watt per meter Kelvin or watt per meter degree
specific heat capacity	joule per kilogram Kelvin or joule per kilogram degree
entropy	joule per Kelvin
amount of electricity	coulomb
electric field strength	volt per meter
voltage	volt
electromotive force	volt
capacitance	farad
magnetic field strength	ampere per meter
magnetomotive force	ampere
magnetic flux density	tesla or weber per square meter
magnetic flux	weber
inductance	henry
electric resistance	ohm
electric conductance	siemens
impedance	ohm
electric power	watt
amount of electric power	joule or watt second, watt hour
electric power density of electromagnetic wave	watt per square meter
radiant intensity	watt per steradian
luminous flux	lumen
luminance	candela per square meter
illuminance	lux
acoustic power	watt
concentration	mole per cubic meter, mole per liter, kilogram per cubic meter, gram per cubic meter, gram per liter
neutron emission rate	per second, per minute
radioactivity	becquerel, curie
absorbed dose	gray, rad
absorbed dose rate	gray per second, gray per minute, gray per hour, rad per second, rad per minute, rad per hour
kerma	gray

kerma rate	gray per second, gray per minute, gray per hour
exposure	coulomb per kilogram, roentgen
exposure rate	coulomb per kilogram second, coulomb per kilogram minute, coulomb per kilogram hour, roentgen per second, roentgen per minute, roentgen per hour
dose equivalent	sievert, rem
dose equivalent rate	sievert per second, sievert per minute, sievert per hour, rem per second, rem per minute, rem per hour

Annexed Table II (Article 4 Related)

Quantity of State of Physical Phenomena	Measuring Unit
reactive electric power	var
apparent electric power	voltampere
reactive electric energy	var second, var hour
apparent electric energy	voltampere second, voltampere hour
attenuation of electromagnetic wave	desibel
acoustic pressure level	desibel
oscillating acceleration level	desibel

Annexed Table III (Article 4 Related)

Quantity of State of Physical Phenomena	Measuring Unit
speed of revolution	turn per minute, turn per hour
pressure	atmospheric pressure
viscosity	poise
kinematic viscosity	stokes
concentration	mass per cent, mass per mill, mass part per million, mass part per billion, volume per cent, volume per mill, volume part per million, volume part per billion, pH

Supplementary Provisions Article 3

(1) The measurement units listed in the right column of the appended table 1 of the supplementary provisions and their decimal multiples specified by Cabinet Order shall be deemed the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table set forth in Article 8, paragraph 1 of the revised Measurement Act until September 30, 1995 (such statutory measurement units shall be hereinafter simply referred to as "measurement units"; such revised Measurement Act shall be hereinafter referred to as the "New Act").

(2) The measurement units listed in the right column of the appended table 2 of the supplementary provisions and their decimal multiples specified by Cabinet Order shall be deemed the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table until September 30,

1997.
(3) The measurement units listed in the right column of the appended table 3 of the supplementary provisions and their decimal multiples specified by Cabinet Order, shall be deemed to be the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table until September 30, 1999.
(4) The definitions of the measurement units prescribed in the preceding three paragraphs shall be prescribed by Cabinet Order.

Supplementary Provisions Article 4
(1) The measurement units prescribed in paragraphs 1 through 3 of the preceding Article may be deemed to be the statutory measurement units by Cabinet Order even after the date specified in each of these provisions.
(2) In the case of the preceding paragraph, such Cabinet Order shall specify the effective period during which the measurement units are deemed to be the statutory measurement units, the scope of transactions and certifications in which the measurement units may be used as the statutory measurement units, and how to use the measurement units as the statutory measurement units.

Supplementary Provisions Article 5
The measurement units in the yard-pound system and their definitions shall be prescribed by Cabinet Order.

Supplementary Provisions Article 6
(1) The French horse power shall be deemed for the time being to be a measurement unit of power in the case where it is used for transactions or certifications pertaining to an internal combustion engine or other transactions or certifications specified by Cabinet Order.
(2) The definition of the French horse power shall be prescribed by Cabinet Order.

Supplementary Provisions Article 8
(1) An indication using a measurement unit prescribed in the provisions of Article 3, paragraphs 1 through 3 of the supplementary provisions that has been stated on a document or affixed to a commodity or other objects on or before the effective date of the measurement unit prescribed in these provisions may be used for the purposes of transactions or certifications even after such effective date notwithstanding the provision of Article 8, paragraph 1 of the New Act.
(2) (omitted)
(3) An indication of a measurement unit prescribed in Article 4, Article 5, Article 7, Article 8, Article 9, paragraph 1 or Article 10, paragraph 1 of the Old Act for Enforcement that has been stated on a document or affixed to a commodity or other objects on or before the effective date of the measurement unit prescribed in Article 3, Article 6, paragraph 1, or Article 10, paragraph 1 of the Old Act for Enforcement may be used for the purposes of transactions or certifications even after such effective date notwithstanding the provisions of Article 8, paragraph 1 of the New Act.

[Annexed Table 1]

Quantity of State of Physical Phenomena	Measuring Unit
force	dyne
work	erg
amount of heat	kilogram-force meter, erg
neutron emission rate	neutron per second, neutron per minute
radioactivity	disintegration per second, disintegration per minute

[Annexed Table 2]

Quantity of State of Physical Phenomena	Measuring Unit
length	micron
frequency	cycle or cycle per second
magnetic field strength	ampere turn per meter, oersted
magnetomotive force	ampere turn
magnetic flux density	gamma, gauss
magnetic flux	Maxwell
acoustic pressure level	phone
concentration	normal

[Annexed Table 3]

Quantity of State of Physical Phenomena	Measuring Unit
force	kilogram-force, gram-force, ton-force
moment of force	kilogram-force meter
pressure	kilogram-force per square meter, gram-force per square meter, meter of mercury, meter of water
stress	kilogram-force per square meter, gram-force per square meter
work	kilogram-force meter
power	kilogram-force meter per second
amount of heat	calorie
thermal conductivity	calorie per second per meter per degree, calorie per hour per meter per degree
specific heat capacity	calorie per kilogram per degree