



OPC (OLE for Process Control)

가 . OPC



OPC (OLE for Process Control)

. OPC

(DCS, PLC)

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OPC (DCS, PLC)

OPC

OPC

OPC WinSEM (Windows for Science, Engineering , and Manufacturing)

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1

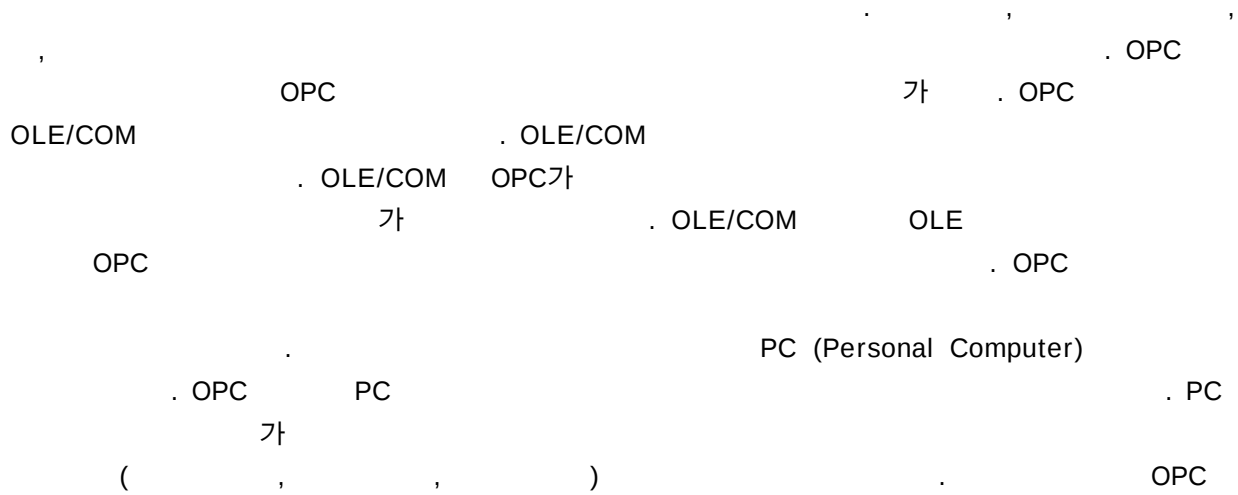
OPC

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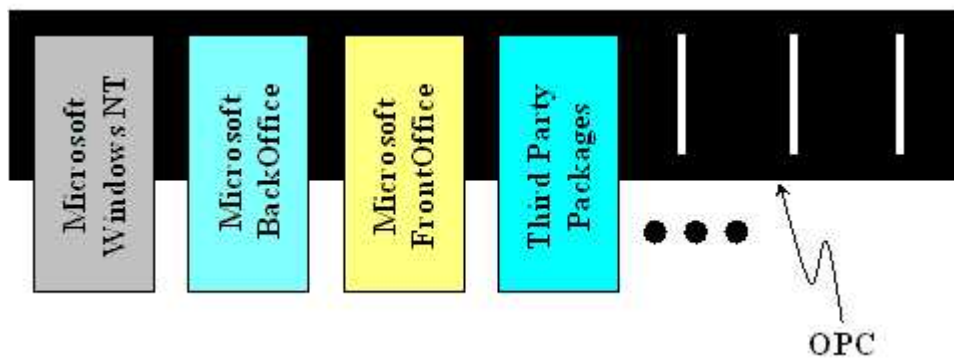
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[-1] Software Backplane

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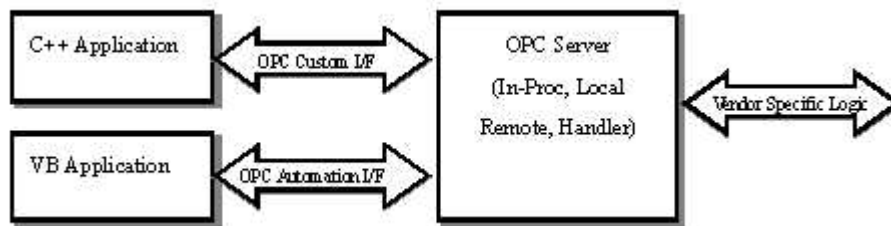
(VB)

(VBA)

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[-2] OPC OLE

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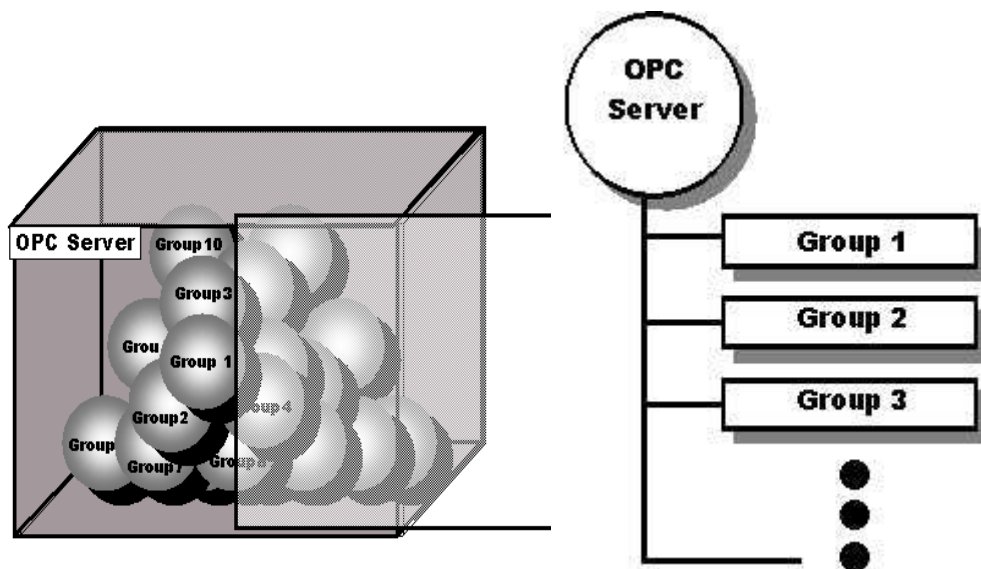
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[-3]

OPC

OPC ITEM

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ITEM

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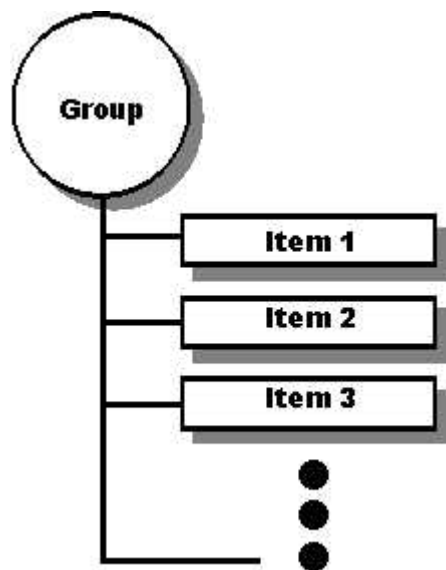
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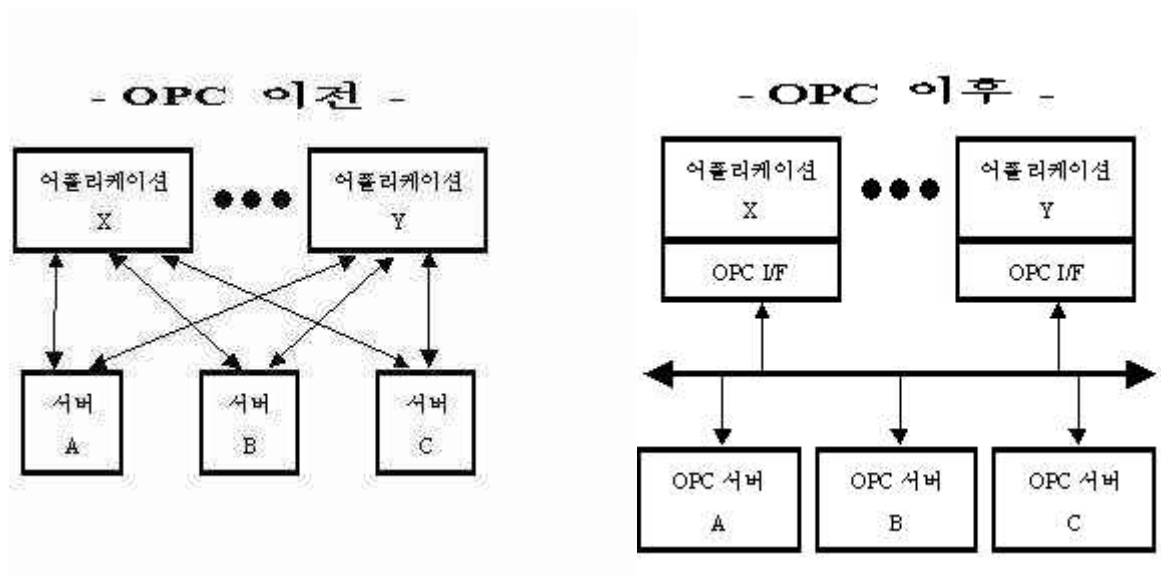
-4



ITEM [-4] ITEM
 ITEM 가 ITEM ID
 . ITEM ID
 . DCS "FIC-123.PV" . PLC
 가 ITEM ID . ITEM

OPC Foundation(TM) OPC
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(MMI HMI)
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[-5] OPC 前 後

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(INTEGRATION)

(Plug &Play)

(SI: System Integrator)

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OPC

OPC 회원사

1999.10.16.일 현재

	Company Name	Location	Representative
1	ABB Asea Brown Boveri	Zurich, Switzerland	Craig Ames
2	ABF Industrial Automation	Martinsried/Pla., Germany	Wolfgang Hochbichler
3	ACT Corporation	Kyoto, Japan	Yoshihiro Okamoto
4	AGE Automation GmbH, Aachen	Aachen, Germany	Gabor Goertz
5	Aigis Systems, Inc.	Caldwell, NJ	Dr. Ming Lu
6	Alcatel Alsthom Recherche	Marcoussis, France	Francois Neumann
7	AlterSys	Longueuil, Quebec, Canada	Paul Baracos
8	AMA-SYSTEMS GMBH	Pforzheim, Germany	Irmhild Maschka
9	Analog Devices	Wilmington, MA	Bobbie Saville
10	Appicom International S.A.	San Francisco, CA	Patrick Jeannette
11	Applied Materials	Santa Clara, CA	Meir Gefen
12	Applied Statistics, Inc.	St. Paul, MN	Brian Humenansky
13	Asahi ElectronicsCo.	Kitakyushu-shi, Japan	Tamoa Yoshiya
14	Asahi Techneion Co., Ltd.	Tokyo, Japan	Fumitaka Kurimoto
15	Aspen Technology	Houston, TX	Elliott Middleton
16	Automsoft International Limited	Dublin, Ireland	Tony Prylowski
17	Bayer Corporation	Pittsburgh, PA	Gerrit Vogel
18	Beckhoff Industrie Elektronik	Verl, Germany	Gerd Hoppe
19	Bently Nevada Corporation	Minden, NV	Rich Bennington
20	BTG Pulp &Paper Technology AB	Saffle, Sweden	Michael Schoning
21	Bullet Software	Charlotte, NC	Jerry Baucum
22	Camstar Systems, Inc.	Campbell, CA	John Poffenbarger
23	Canary Labs, Inc.	Martinsburg, PA	Gary Stern
24	Cerberus Dati S.P.A.	Milano, Italy	Renato Colcerasa
25	Chino Corporation	Tokyo, Japan	Katanobu Hosoya
26	Chiyoda Corporation	Tokyo, Japan	Mitsuharu Kato
27	Ci Technologies Pty Limited	Pymble, Australia	Jim Wicker
28	CODRA	courtboeuf CEDEX, France	Jean-Claude Hallynck
29	Comdale Technologies Inc.	Toronto, Ontario, Canada	Mark Farmer
30	CONTEC Corporation	Tokyo, Japan	JirouTarmai
31	CSK Corporation	Tokyo, Japan	Kiyoshi Azuma
32	Cyberlogic Technologies, Inc.	Troy, MI	Paul Mikulski
33	Descartes Systems Sciences, Inc.	Lithonia, GA	Tim Smith
34	Distributed Devices LTD	Rosh Hain, Israel	Adam Ferman
35	Dynapro Systems Inc.	New Westminster, BC Canada	Adrian Dumitrescu

36	Eldridge Engineering, Inc.	Spokane, WA	Ken Eldridge
37	Elsag Bailey	Wickliffe, OH	Dr. Jay Bayne
38	ETM - EDV - Technik Muhlgassner	Eisenstadt, Austria	Bernhard Reichl
39	Eurotherm Controls & Instrumentation Division - UK	West Sussex, England	Mike Dillamore
40	Eutech Cybernetics Pte Ltd.	Singapore	Tharaka Gooetilleke
41	EZI GesmbH	Villach, Austria	Sterner Hermann
42	FactorySoft, Inc.	Mansfield, MA	Jim Hansen
43	Fisher-Rosemount Systems	Austin, TX	David Rehbein
44	Fuji Electric Co., Ltd.	Hino-city, Japan	Shigeo Kuroiwa
45	GE Fanuc Automation North America, Inc.	Charlottesville, VA	Jeff Wilson
46	GEA Automation R&D Ltd.	Dublin, Ireland	Robert Finn
47	Geneer	Des Plaines, IL	Don Oppershauser
48	Gesytec GmbH	Aachen, Germany	Heiko Petzsch
49	Gfs mbH	Aachen, Germany	Dieter Peuser
50	Grayhill Inc.	LaGrange, IL	Robert Colburn
51	GSE Systems, Inc.	Columbia, MD	Alan MacAnespie
52	GTI - Gesellschaft f?r technische Informationsverarbeitung mbH	Markttheidenfeld, Germany	Karl Amthor
53	HamamaTsu Photonics K.K.	HamamaTsu City, Japan	Toru Matsumoto
54	Hardy Software Systems, Inc.	Houston, TX	Vince Adamo
55	Hilscher Gesellschaft f?r Systemautomation mbH	Hattersheim, Germany	Robert Mayer
56	Hitachi Ltd.	Ibaraki, Japan	Masalihiro Ishida
57	Hitachi Naka Electronics Co., Ltd.	Ibaraki, Japan	Mitsugu Hiramoto
58	Honeywell	Phoenix, AZ	Andrew Kowalczyk
59	Huakong Technology Co. Ltd.	Beijing, China	Guangchuan Zhang
60	ICONICS Inc.	Foxborough, MA	Russell Agrusa
61	IDAX, Incorporated	Norfolk, VA	Robert S. Bradlee
62	IDV Klingenmeier & Schreiber	Cologne, Germany	Timo Klingenmeier
63	ifak system GmbH	Barleben, Germany	T. Szczepanski
64	Indramat GmbH	Lohr am Main, Germany	Klaus Kasperek
65	InduSoft Ltd.	Hilton Head, SC	Marcos Taccolini
66	Ingelectric-Team S.D.	Zamudio, Spain	Luis Maria Gonzolez Cubillo
67	INOSOFT GmbH	Herford, Germany	Stefan Niermann
68	Institut f?r Automation und Kommunikation e.V. Magdeburg	Barleben, Germany	Frank Iwanitz
69	Institut f?r Informationstechnik im Maschinenwesen	Garching/Munich, Germany	Prof. Klaus Bender
70	Intellution Inc.	Norwood, MA	Al Chisholm
71	Interbus Club Germany e.V.	Blomberg, Germany	Martin Mueller
72	Interface Corporation	Hiroshima, Japan	Osamu Oue
73	Intrinsyc Software, Inc.	Vancouver, B.C., Canada	Guylain Roy MacHabie
74	Intuitive Technology Corp.	Marlboro, MA	Seamus McGrady
75	Ishikawajima-Harima Heavy Industries Co., Ltd.	Tokyo, Japan	Shigeru Matsusaka

76	Iwai Kikai-Kogyo Co., Ltd	Tokyo, Japan	Akihiro Katoh
77	Jetter GmbH	Ludwigsburg, Germany	Andreas Kraut
78	JGC Corporation	Yokohama, Japan	Ken Oguri
79	Kaneka Engineering Corporation	Hyogo, Japan	Keizo Oouchi
80	Kawasaki Heavy Industries, Ltd.	Akashi, Japan	Kazuhiko Onoue
81	KEPware Inc.	Portland, ME	Mark Hensley
82	Klinkmann Automation Oy	Helsinki, Finland	Jari Hyv?en
83	Klopper und Wiege Software GMBH	Lemgo, Germany	Andreas Orzelski
84	Kyowa Electronic Instruments Co., Ltd.	Tokyo, Japan	Kei Sugimoto
85	Kyushu Electronics System, Inc.	Kitakyushu-City, Japan	Katsunori Matsuo
86	Lacroix Sofrel Telecontrol	Vern Sur Seiche, France	Gilles Rouault
87	Landis & Staefa, Inc.	Buffalo Grove, IL	Phil Poznanski
88	Matrikon Consulting, Inc.	Edmonton, Alberta Canada	Amin Rawji
89	MDC Technology Limited	Middlesbrough, England	Christopher J. Hawkins
90	Meidensha Corporation	Tokyo, Japan	Satoru Komiyama
91	Microsoft Corporation	Redmond, WA	Don Richardson
92	Mitsubishi Electric Corporation	Nagoya, Japan	Yuji Watanabe
93	Moore Products Co.	Spring House, PA	Michael S. Horn
94	Morinaga Milk Industry Co., Ltd.	Tokyo, Japan	Akitoshi Sugiura
95	M-System Co., Ltd.	Osaka, Japan	Yoshiaki Murakami
96	National Instruments	Austin, TX	Don Holley
97	Nemasoft, Inc.	Foxboro, MA	Robert Mick
98	Northern Dynamic Inc.	Waterloo, Ontario Canada	Gordon Ellis
99	Novo Nordisk Engineering, A/S	Bagsvaerd, Denmark	Niels Christian Anderson
100	ObjectAutomation	Santa Ana, CA	John Ham
101	Omega Simulation Co., Ltd.	Tokyo, Japan	Joji Murakami
102	OMNX Control Systems	Charleston, TN	David W. Cawfield
103	OMRON Corporation	Yakohoma-city, Japan	Tadaaki Hotta
104	OMRON Software Co., Ltd.	Kanagawa, Japan	Teruo Onishi
105	Ono Sokki Co., Ltd.	Kanagawa, Japan	Shinichi Nagashima
106	Open Control Nutzergruppe	Blomberg, Germany	Alfredo Baginski
107	OPTO 22	Temecula, CA	Jim Frederick
108	ORSI Automazione S.p.A.	Genova, Italy	Stefano Bergonzi
109	OSI Software, Inc.	San Leandro, CA	Ayana Craven
110	PC Soft International	Petach Tikva, Israel	Elan Roth
111	Perceptron, Inc.	Plymouth, MI	Thomas Rzeznik
112	Phoenix Contact GmbH & Co.	Blomberg, Germany	Christof Burmann
113	PID	Phoenix, AZ	Robert Kline Jr.
114	Power Measurement	Saanichton, B.C. Canada	Mike Techman
115	Prediktor AS	Fredrikstad, Norway	Espen Krogh
116	Previs Inc.	Toronto, Ontario, Canada	Kevin Yeung
117	Process Automation Systems, Inc.	Vancouver, B.C.	Bill Gough

		Canada	
118	PROFIBUS Nutzerorganisation e.V.	Karsruhe, Germany	Michael Volz
119	ProMicro Limited	London, England	A.V. Geris
120	Qualitrol International	Charlotte, NC	John B. Weber
121	RadiSys Corporation	Hillsboro, OR	Brett Prochaska
122	Raytheon - HRB Systems	State College, PA	Jane M. Orsulak
123	Roboticsware, Inc.	Saitama, Japan	Hiroya Miyazaki
124	Rockwell Software Inc.	West Allis, WI	Thomas Burke
125	Roy-G-Biv Corporation	Seattle, WA	Jay Clark
126	Sankyo Seiki Mfg. Co., LTD.	Ina - City, Japan	Hiroshi Tonouchi
127	Schneider Automation SA	Seyssinet, France	Thierry Roussel
128	Science Systems (Industrial) Ltd.	Bristol, England	Steve Brignall
129	Serck Controls Ltd.	West Midlands, England	Robert Bradford
130	SET Software Co., Ltd.	Tokyo, JAPAN	Akira Ishimaru
131	Shell Oil Products, Co.	Houston, TX	Herbert Epstein
132	Siemens AG	Nuremberg, Germany	Reinhold Achatz
133	Simulation Sciences Inc.	Brea, CA	James M. McDonald
134	SL Corporation	Corte Madera, CA	Eli Rosner
135	SMAR Research Corporation	Sertaozinho, Brazil	Alexandre Pimenta
136	SMI Control Engineering Co., Ltd.	Tokyo, Japan	Seiji Umeda
137	Softing GmbH	Haar, Germany	Lange J?gen
138	SoftPLC Corporation	Humble, TX	Daniel Hollenbeck
139	S-S Technologies Inc.	Kitchener, Ontario Canada	Gary Klassen
140	Start Enterprise	Houston, TX	Dave Hardin
141	Steeplechase Software	Ann Arbor, MI	Chuck Kallal
142	TA Engineering Co., Inc.	Moraga, CA	Eric Hsu
143	Takebishi Electric Sales Corporation	Kyoto, Japan	Hiroshi Okagaki
144	Taylor Industrial Software	Edmonton, Alberta Canada	Bernie Anger
145	Techosoftware AG	Niederleuz, Switzerland	Markus Thomi
146	Tec-It Datenverarbeitung GmbH	Amstetten, Austria	Christian Urban
147	Teknedata SRL	Milano, Italy	Vanetti Massimo
148	Teletrol Systems, Inc.	Manchester, NH	Mahender Korandla
149	TEMAS Ltd.	Frasnacht, Switzerland	Karl Hoehener
150	Tetra Pak Converting Technologies AB	Lund, Sweden	Peter Malmqvist
151	The Foxboro Company	Foxboro, MA	Ronald Lareau
152	The Software Studio	Cupertino, CA	Charles Berg
153	Toshiba Corporation	Tokyo, Japan	Yoh Shimanuki
154	Toyo Engineering Corporation	Chiba, Japan	Yuji Sano
155	Toyoda Machine Works, Ltd.	Aichi, Japan	Kuniyuki Niwa
156	Trebing &Himstedt Prozessautomation GmbH &Co. KG	Schwerin, Germany	Steffen Himstedt
157	Triconex Corporation	Irvine, CA	Thomas J. Matheson
158	Tsubakimoto Chain Co.	Osaka, Japan	Akira Ohyama
159	Tsuzuki Software Co., Ltd.	Tokyo, Japan	Michikazu Shida
160	USDATA	Richardson, TX	Paul Shinohara

161	Valmet Automation Inc.	Helsinki, Finland	Ari Kankaanper?
162	VenturCom, Inc.	Cambridge, MA	Bruce Ericson
163	VISCOM Visual Communicatons	Bern, Switzerland	Stefan Friedli
164	VMIC	Huntsville, AL	Ben Park
165	VTT Automation	VTT, Finland	Olli Venta
166	Wonderware Corporation	Irvine, CA	Vickie Young
167	Yamatake Industrial Systems Co., Ltd	Yokohama City, Japan	Soichiro Uchinuma
168	Yokogawa Electric Corporation	Tokyo, Japan	Hiroyuki Nakagawa
169	Z Systems Co., Ltd.	Ehime, Japan	Masayuki Higaki