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(PD/01/01/1789->05/21/2013) AND ((“hole semiconductor elongated”~20) OR (“hole semiconductor vertical”~20)) AND (photoelectric OR photodiode OR photodetect*)

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Date Range*	All years	Last 20 years
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* Entering date parameters in the box will override the 'date range' buttons.

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Note that most fields support Phrase (ABST/"cardboard box"), Proximity (ABST/"cardboard box"~5), Wildcard (ABST/card*), and Leading Wildcard (ABST/*ectomy) queries. Some fields support range queries and math operations. Only basic examples are provided below.

Field Abbr.	Field Name	Type	Syntax Example and Comments
AADR	Assignee Address (complete string)	Text	AADR/California AADR/"Route 66"
ABST	Abstract	Text	ABST/widget ABST/"titanium steel"
AC	Assignee City	Text	AC/Paris AC/"New York"
ACLM	Claims	Text	ACLM/"cardboard box"
ACN	Assignee Country	Text	ACN/JP or ACN/US
AGT	Agent	Text	AGT/"Bacon & Thomas"
AGTC	Agent Address City	Text	AGTC/Paris
AGTCN	Agent Country	Text	AGTCN/JP
AGTN	Agent Name ?	Text	AGTN/smith
AN	Assignee Name ?	Text	AN/smith
APD	Filing Date	Date ?	Single Date: APD/1/5/2012 Range: APD/1/1/1790->12/31/2001 Math: APD/NOW-20YEAR->NOW
APN	Application Number	Text	APN/123456 APN/09/123456 APN/123*
AS	Assignee State	Text	AS/NY
ASEX	Assistant Examiner Name ?	Text	ASEX/jones
CCL	US Class	Text	CCL/100/50
DN	Document Number (same as PN)	Number ?	DN/6954235 DN/20070220636

ECLA	ECLA Classification	Text	ECLA/G08B25/10 ECLA/G08B25*
FOS	Field of Search	Text	FOS/714/100 FOS/714/*
FREF	Foreign Patent Reference (entire string)	Text	FREF/titanium
FREFN	Foreign Patent Reference (number only)	Number ?	FREF/EP0628292
IADR	Inventor Address (entire string)	Text	IADR/"main street"
IC	Inventor City	Text	IC/Munich
ICN	Inventor Country	Text	ICN/GB
IN	Inventor Name ?	Text	IN/smith
IPC	IPC Classification	Text	IPC/A63F13/00 IPC/A63F13/*
IPCR	IPC Revised	Text	IPCR/A63F13/00 IPC/A63F13/*
IS	Inventor State (U.S.)	Text	IS/ca
ISD	Publication Date	Date ?	Single Date: ISD/1/5/2012 Range: ISD/1/1/1790->12/31/2001 Math: ISD/NOW-1MONTH->NOW
KCOD	Kind Code	Text	KCOD/b1
OREF	Other References	Text	OREF/titanium
PARN	Parent Case	Text	PARN/704,848 PARN/"application Ser. No. 704,848"
PCCL	Primary Class	Text	PCCL/702/100
PD	Publication Date	Date ?	PD/12/08/2009
PEX	Primary Examiner Name ?	Text	PEX/smith
PN	Patent Number (same as DN)	Number ?	PN/6954235 PN/20070220636
PRICN	Priority Country	Text	PRICN/FR

PRIN	Priority Number	Number ?	PRIN/83711 PRIN/837*
PRIR	Foreign Priority	Text	PRIR/9/16/1990
PT	Document Type	Text	PT/PP Possible values: U (Utility) RE (Reissue) D (Design) PP (Plant Patent)
REF	US Patent Reference (entire string)	Text	REF/aluminum
REFN	US Patent Reference (number only)	Number ?	REFN/6000000
SPEC	Specification (a.k.a. Description)	Text	SPEC/aluminum
TTL	Title	Text	TTL/aluminum

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