Procedural Review Voting Sheet 2014 Cycle 7

REGION: China

COMMITTEE: Photovoltaic

EVENT: SEMI China PV Standard TC 2014 Winter Meeting

DATE OF MEETING: Dec. 12, 2014

PLACE OF MEETING: Rongyuan Hotel, #225 Chezhan North Road, Changsha, Huna, China

COMMITTEE CO-CHAIRS: Guangchun Zhang/CSI, Jun Liu/CESI

SEMI STAFF: Kris Shen

A&R Voter: Name/Company

Date: 200X/MM/DD

I. Document Number & Title

5724	New Standard: Guide for Specifying Quasi
	Monocrystalline Silicon Wafers used in
	Photovoltaic Solar Cells

II. Tally (Staff to fill in)

Voting Tally: As-cast tally after close of voting period

A minimum of 60% of the voting interests that have voting members within the technical committee must return votes. (Regulations \P 9.6.1)

	Return	Distribution Return Rate
Yellow	92	÷ 153 = 60.1% >=60%
Lilac & Others	70]
Total Vote	162]
Reject	3]
Accept	42]

A&R	Not approved
Adr	Reason:

III. Rejects

Reject 1 (Valley John, SunEdison) Negative 1 of Reject 1

	Referenced Section								
Negative	Reason	If I PV do	This is just another PV silicon wafer and should be included in SEMI PV2. If new metrics and new terms are required they should be in the primary PV wafer specification document, PV22. Multiple PV wafer specification documents will lead to market confusion. Multiple PV wafer specification documents will lead to duplication of effort to update and maintain the standards.						
	MC4b dwarral	X	No withdrawal made		GO TO "Related" section				
	Withdrawal		Withdrawal document received by staff	on XXXX	GO TO "Final" → (A)				
			"Related" is mutually agreed upon.						
	Motion and		*This motion can be appended to the motion for Persuasive (See Persuasive Section)						
	Reason		Negative is related (needs over 1/3 votes to pass)						
			Negative is not related (needs 2/3 or more votes to pass)						
			Reason XXXX						
刃	Motion by/2nd by	Na	me (Company)/Name (Company)						
Related	Discussion								
			[Negative is related] > 1/3						
	Result of Vote (check ONE)		[Negative is not related] < 2/3	GO TO "Persi	uasive"				
	(SIISON SIVE)		2/3=< [Negative is not related]	GO TO "Final	" → (B)				
_		Х	Negative is related and persuasive (ne	eds over 1/3 vo	otes to pass)				
'ers	Motion and Reason		Negative is related and not persuasive	(needs 2/3 or n	nore votes to pass)				
Persuas ve	Neason		Reason						
5	Motion by/2nd by	На	Hai Liu (LDK)/Zhixin Li (Linton)						

	Discussion	TF: We did some investigations and the results indicated that peonot think Quasi-monocrystalline silicon wafer was multi neither although it was produced for years as a crystalline silicon wafer intention we wrote the document 5382# is to pave the way development of quasi-mono, considering the compatibility with PV changed the form as a "Guide"5724# so that it can be used to go new specifications(PV22 or others) as you suggested in cycle 3/201 John: The fact is: Table 2 of your document looks like a specificate even though you call the document a guide. This is, in my disingenuous. The fact that you assign different row numbers i document Table 2 than the PV22 entries for the same specificate bound to lead to trouble in the future and goes completely againg grain of long established traditions within Standards bodies. The row numbers should be the same and new row numbers added to it the new parameters. TF: By a concise discussion in our TF, we would like to adapt the numbers in document 5724# for Standards Bodies and make the expresent it in the next version. John: I appreciate the efforts of your TF to make this Guide a useful non-conflicting addition to the body of Standards.						
		38	-0					
		X	[Negative is related and persuasive] > 1/3			"Final" →		
	Result of Vote		[Negative is related and not persuasive] < 2/3		(E)			
	(check ONE)		2/3=	[Negative is related and not persuasi	ve] <90%	GO TO	"Final" →	
			90%	=< [Negative is related and not persua	asive]	GO TO Signification	"Not nt Finding	
Not Significant Finding Option	This option can only be used "if the committee finds a negative not per vote equal to or greater than 90% of the persons voting on the action". (19.5.3.3.2)							
ifican			It is r	nutually agreed upon to term the nega	ative "not sig	nificant"	GO TO →	
t Find			It is r	nutually agreed upon to term the nega	ative "signific	ant"	GO TO →	
ding (Motion		The	negative is "not significant".			(C)	
Optic	Motion by/2nd by	Na	me (C	ompany)/Name (Company)				
ĭ	Vota		XX-X	X Motion passed with simple majority	GO T	O → (D)		
	Vote		XX-X	X Motion failed with simple majority	GO T	0 → (C)		
		Ne	gative	is:	·			
	Final		(A)	withdrawn (counted under h in dispos				
			(B)	not related (counted under i in dispos	sition)			

				(C)	related and not persuasive (significant)		
				(D)	not significant (counted under j in disposition)		
			X	(E)	related and persuasive	DOCUMENT FAILS	
				Com	ment generated. See comr	nent #x	
A&R Not approved							
Aor	ason:	ason:					

Disposition of Reject 1

	2.0000								
	Original numbe	r of N	(g)						
	# of Negatives	withd	rawn		(h)				
	# of Negatives f	found		(i)					
	# of Negatives f	found		(j)					
			g -(h + i + j)=0	Reject is Not Valid denominator of § VI. Appro	and is not included in the oval Conditions Check				
	Final		Final g-(h+i+j)>0		n the denominator of § VI.				
			Reject without a Negative	Not Valid					

Note: If all of the negative material included with a reject vote is withdrawn, determined to be not related, or determined to be not significant, the reject vote is not valid. (Regulations ¶ 9.4.3.3)

400		Not approved
A&R	Re	eason:

Reject 2 (Peter Wagner, Peter Wagner Consulting)

Negative 1 of Reject 2

Ne	Referenced Section								
Negative	Reason	As communicated several times before the content of this document could easily be included in SEMI PV22.							
	With drawal		No withdra	awal made	GO TO "Related" section				
	Withdrawal		Withdrawa	al document received by staff on XXXX	GO TO "Final" → (A)				
			"Related"	is mutually agreed upon.					
Related	Motion and Reason			otion can be appended to the motion to ve Section)	for Persuasive (See				
ate			Negative is related (needs over 1/3 votes to pass)						
ď			Negative	ass)					
			Reason	XXXX					

	Motion by/2nd by	Name (Company)/Name (Company)							
	TF: We did some investigations and the results indicated that people not think Quasi-monocrystalline silicon wafer was multi neither mor although it was produced for years as a crystalline silicon wafer. The intention we wrote the document 5382# is to pave the way for the development of quasi-mono, considering the compatibility with PV2 changed the form as a "Guide"5724# so that it can be used to general new specifications(PV22 or others) for the respect of your negative comments in cycle 3/2014. Peter: No response.						er mono, er . The the h PV22 we generate		
		XX	(-XX						
			[Negative	is related] > 1/3	GO ТО	"Persu	uasive"		
	Result of Vote (check ONE)		[Negative	is not related] < 2/3					
	,		2/3=< [Ne	gative is not related]	GO ТО	"Final"	" → (B)		
	Mation and		Negative	is related and persuasive (ne	eeds ove	r 1/3 vo	tes to pa	iss)	
	Motion and Reason		Negative is related and not persuasive (needs 2/3 or more votes to p				es to pass)		
			Reason XXXX						
	Motion by/2nd by Discussion	Na	ime (Comp	any)/Name (Company)					
Pe	Discussion	ΥY	XX-XX						
Persuasive	Result of Vote	70	[Negative	is related and persuasive] >			GO TO	"Final" →	
	(check ONE)		2/3=<[Ne	gative is related and not pers	suasive] <	90%	GO TO	"Final" →	
			90% =< [1	Negative is related and not po	ersuasive]	GO TO Significa Option"	"Not nt Finding	
Not Significant Finding Option	This option can only be used "if the committee finds a negative not persuasive vote equal to or greater than 90% of the persons voting on the action". (Regulati 9.5.3.3.2)								
ificant			It is mutua	ally agreed upon to term the	negative '	not sig	nificant"	GO TO → (D)	
Find			It is mutua	ally agreed upon to term the	negative '	'signific	ant"	GO TO → (C)	
ing O	Motion		The nega	tive is "not significant".					
)ptio	Motion by/2nd by	Na	me (Comp	any)/Name (Company)					
ם	Vote		XX-XX Mo	otion passed with simple maj	ority	GO TO	D → (D)		
	7010		XX-XX Mo	otion failed with simple major	ity	GO TO	O → (C)		
	Final	Ne	gative is:						

				(A)	withdrawn (counted under h in disposition)		
				(B)	not related (counted under i in disposition)		
				(C)	related and not persuasive (significant)		
				(D)	not significant (counted under j in disposition)		
				(E)	related and persuasive	DOCUMENT FAILS	
				Com	ment generated. See comr	ment #x	
A&R Not ap			pro	ved			
Aar	Reason:						

Negative 2 of Reject 2

	gative 2 of Reje	<u> </u>						
	Referenced							
_	Section							
Negative	Reason	The term "quasi-monocrystalline" is misleading. In fact, wafers according to category 1 (Table 1, line 1.3) of doc 5724 would be single crystalline wafers, albeit with a high density of dislocations, and wafers according to categories 2 and 3 would be multicrystalline wafers.						
					GO TO "Related"			
	1400		No withdrawal made	section				
	Withdrawal		Withdrawal docume	nt received by staff on XXXX	GO TO "Final" → (A)			
			"Related" is mutually	agreed upon.				
R	Motion and		*This motion can Persuasive Section	be appended to the motion	for Persuasive (See			
Related	Reason		Negative is related (needs over 1/3 votes to pass)					
ed			Negative is not relat	ed (needs 2/3 or more votes to	pass)			
			Reason XXXX					
	Motion by/2nd by	Name (Company)/Name (Company)						

	Discussion	we but fou war gai mo Pet mo star fiel def acc sho the cor war is t me war Wh the call cor bet	TF: A term such as "large grained multicrystalline" is very precise, and we think the "quasi-monocrystalline" is easy to be understood as well, but anyway it is just a "Term" and we can make a better choice. We found that a wafer according to category 1 is not a single-crystalline wafer as many inclusions(micrometers size) can be found in it; and it will gain more energy if we treated the "wafer according categories 2" as mono wafer thus we suggest to differ it Peter: I fully understand that people that are working with quasi-monocrystalline Si know the meaning of the term. However, SEMI standards are used by many people and in particular by newcomers in the field. For them, and in order to avoid confusion, the term should be defined uniquely and should not require to make assumptions. If a wafer according to category 1 is not really single crystalline then this category should not be called so. As far as I understand the ingot for quasi-monocrystalline Si is in fact multicrystalline. When this ingot is sliced then by chance or by careful selection wafers may be obtained that consist of only one grain. So, such a wafer then would be a single-grain wafer cut from a multicrystalline ingot or block. Maybe a better approach is to attempt a definition of "quasi-monocrystalline Si" based on its method of production: "Si grown by directional solidification on seed wafers", or similar. You mention that the material contains inclusions. What kinds of inclusions are they? Foreign material or misoriented Si? If the concentration of these inclusions is small then this still could be called single crystalline Si. If the concentration is high and the material contains also a high density of dislocations then the material might be better called "meta-crystalline", something in between single crystalline					
		and polycrystalline/amorphous. TF:						
		XX	-XX					
			[Negative is related] > 1/3	GO TO "Persu	uasive"			
	Result of Vote (check ONE)		[Negative is not related] < 2/3					
	(5.135K 3112)		2/3=< [Negative is not related]	GO TO "Final"	" → (B)			
	Matiens		Negative is related and persuasive (ne					
	Motion and Reason		Negative is related and not persuasive	(needs 2/3 or n	nore votes to pass)			
٦			Reason XXXX					
ers	Motion by/2nd by	Nar	me (Company)/Name (Company)					
Persuasive	Discussion	<u> </u>						
iive	Result of Vote (check ONE)	XX	-XX [Negative is related and persuasive] > [Negative is related and not persuasive]	GO TO "Final" → (E)				

				2/3=	<[Negative is related and no	ot persuasive] <	90%	GO TO	"Final" →			
				90%	=< [Negative is related and	I not persuasive]		GO TO "Not Significant Finding Option"			
Not Significant Finding Option		equal to or			used "if the committee than 90% of the person							
ifican				It is ı	mutually agreed upon to ter	m the negative	"not sigi	nificant"	GO TO →			
t Find				It is ı	mutually agreed upon to ter	GO TO →						
ing (N	/lotion		The	ne negative is "not significant".							
Optio	Motio	n by/2nd by	Na	ıme (C	(Company)/Name (Company)							
Ď		Vote		XX->	XX-XX Motion passed with simple majority GO TO → (D)							
		vote		XX->	XX Motion failed with simple	o → (C)						
			Ne	gative	e is:							
				(A)	withdrawn (counted under	h in disposition)					
				(B)	not related (counted unde	r i in disposition)					
	Fi	nal		(C)	related and not persuasive							
				(D)	not significant (counted ur	nder j in disposit	ion)					
				(E)	related and persuasive	DOCUMENT	FAILS					
				Com	Comment generated. See comment #x							
	0 D	Not ap	pro	ved								
A	&R	Reason:										

Negative 3 of Reject 2

7	Referenced Section									
Negative	Reason	Doc 5724 has to include a specification for dislocation density.								
	Withdrawal	No withdrawal made		awal made	GO TO "Related" section					
	withdrawai		Withdrawa	al document received by staff on XXXX	GO TO "Final" → (A)					
			"Related"	is mutually agreed upon.						
Related	Motion and	Porcussive Section)		otion can be appended to the motion to ve Section)	notion for Persuasive (See					
ate	Reason		Negative	is related (needs over 1/3 votes to pass)						
g			Negative	is not related (needs 2/3 or more votes to p	ass)					
			Reason	XXXX						

	Motion by/2nd by	Na	me (Company)/Name (Company)						
	Discussion	TF me co eff dis cle 57 Pe im	eeting of 2014 China PV committee is mmittee members think dislocation described from the ficiency for wafer produced by DSS belocated region does. And as it is an obsely interrelated to the percentage of 24# is a weaker Guide, we made the ter: If the percentage area of highly deportant than grain size then this should be largest grain.	fune 13, t influencentage roblem(nin) and conclude it ons is mo	most of the ce the cell of very not so document				
		XX	-XX						
	Result of Vote (check ONE)		[Negative is related] > 1/3	CO TO "Dorro					
			[Negative is not related] < 2/3	GO TO "Persu					
			2/3=< [Negative is not related]	GO TO "Final"	" → (B)				
			Negative is related and persuasive (ne	eds over 1/3 vo	tes to pa	ıss)			
	Motion and Reason		Negative is related and not persuasive	(needs 2/3 or n	nore vote	es to pass)			
		Reason XXXX							
	Motion by/2nd by	Name (Company)/Name (Company)							
P	Discussion	VV							
ersu		XX	(-XX						
Persuasive			[Negative is related and persuasive] >	1/3		"Final" →			
Vе	Result of Vote		[Negative is related and not persuasive	e] < 2/3	(E)				
	(check ONE)		2/3=<[Negative is related and not person	GO TO	"Final" →				
			90% =< [Negative is related and not pe	90% =< [Negative is related and not persuasive]		"Not nt Finding			
Not Significant Finding Option			only be used "if the committee finds a negative not persuasive by a greater than 90% of the persons voting on the action". (Regulations ¶						
ant Fi ion			It is mutually agreed upon to term the r	negative "not sig	nificant"	GO TO →			
indin			It is mutually agreed upon to term the r	negative "signific	ant"	GO TO →			
g	Motion		The negative is "not significant".			(C)			

	Motio	n by	2nd by	Na	ame (C	Company)/Name (Company)			
		Vote			XX->	XX Motion passed with simple m	najority	GO TO → (D)	
		vote	5		XX->	XX Motion failed with simple ma	jority	GO TO → (C)	
			Ne	egative	e is:				
					(A)	withdrawn (counted under h in disposition)			
					(B)	not related (counted under i in disposition)			
	Fi	nal			(C)	related and not persuasive (significant)			
					(D)	not significant (counted under j in disposition)			
					(E)	related and persuasive D	OCUMENT	FAILS	
					Comment generated. See comment #x				
^	0 D		Not ap	pro	ved				
A	Reason:								

Negative 4 of Reject 2

	Referenced Section									
Negative	Reason	an mu ac qu de us mo	cording to the definition of the term "quay multicrystalline wafer would be a quasi- ulticrystalline wafer has a largest grain, we cording to this definition any single crystalline wafer, because it is a si-monocrystalline wafer, because it is a fined crystallographic orientation. Therefoless. Therefore the definition has to be conocrystalline" cannot be introduced and say "specified crystallographic orientation.	i-monocrystalline which has a definalline Cz-Si wafe single crystalline fore, this definition improved or the used. Probably	e wafer, because any led orientation. Again let also would be a let and again has a lon is completely term "quasi-2/2 the authors wanted					
	Withdrawal		No withdrawal made		GO TO "Related" section					
	Witharawai		Withdrawal document received by staff	on XXXX	GO TO "Final" → (A)					
			"Related" is mutually agreed upon.							
	Motion and		*This motion can be appended to the motion for Persuasive (See Persuasive Section)							
	Reason		Negative is related (needs over 1/3 vo	Negative is related (needs over 1/3 votes to pass)						
			Negative is not related (needs 2/3 or n	nore votes to pa	ass)					
_			Reason XXXX							
}eli	Motion by/2nd by	Na	me (Company)/Name (Company)							
Related	Discussion	or	TF: The "defined orientation" means "specified crystallograph orientation be defined". Peter: That is what I assumed.							
		XX	(-XX							
	Result of Vote		[Negative is related] > 1/3	00 TO "D						
	(check ONE)		[Negative is not related] < 2/3	GO TO "Persເ	Jasive"					

				2/3=<	: [Ne	gative is not	related]		GO TO	"Final'	' → (B)	
				Nega	tive	s related an	d persuas	sive (ne	eds ove	r 1/3 vo	tes to pa	ıss)
		tion and Reason		Negat	tive	s related an	d not pers	suasive	(needs 2	2/3 or m	nore vote	es to pass)
				Reas	on	XXXX						
	Motio	n by/2nd by	Na	me (Co	omp	any)/Name (Company)				
,	Dis	scussion										
ers			ХХ	(-XX						1		
Persuasive		Result of Vote (check ONE)		[Negative is related and persuasive] > 1/3								"Final" →
/e	Resi			[Negative is related and not persuasive] < 2/3							(E)	
	(ch			2/3=<	/3=<[Negative is related and not persuasive] <90%				GO TO (C)	"Final" →		
				90% =< [Negative is related and not persuasive]						GO TO "Not Significant Finding Option"		
Not Significant Finding Option		equal to or		nly be used "if the committee finds a negative not persuasive by a reater than 90% of the persons voting on the action". (Regulations ¶ It is mutually agreed upon to term the negative "not significant" GO TO →								
ınt Fin									egative '	not siar	nificant"	
ding	ľ			It is mutually agreed upon to term the negative "signification								(D) GO TO →
Opti		Motion				ally agreed u	pon to ter	m the n				(D)
으	Motion by/2nd by		Na	The n	ega	ally agreed u	pon to ter	m the n				(D) GO TO →
١ ,	WOTIO	Motion on by/2nd by	Na	The n	ega omp	ally agreed utive is "not si any)/Name (pon to ter gnificant". Company	m the n	egative '	'signific		(D) GO TO →
	MOTIO		Na	The name (Co	omp	ally agreed untive is "not si any)/Name (otion passed	pon to ter gnificant". Company with simp	m the n	egative '	'signification's	ant"	(D) GO TO →
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, 		n by/2nd by		The name (Co	x Mox is:	ally agreed untive is "not si any)/Name (option passed option failed worderwork)	pon to ter gnificant". Company with simple ith simple ted under	m the n ble majorit h in dis	prity ty sposition	GO TO	ant"	(D) GO TO →
ר		Vote		The name (Co	x Mox mot not rela	ally agreed untive is "not si any)/Name (option passed option failed word drawn (countelated (cour	pon to ter gnificant". Company with simple ith simple ted under nted under	the majorite majorite majorite in dise (signification of the majorite major	prity ty sposition sposition cicant) disposit	GO TO	ant" D → (D) D → (C)	(D) GO TO →
ר ר		Vote		The name (Co	x Mox Mox mot relations	ally agreed untive is "not si any)/Name (option passed option failed word drawn (countrelated (courted and not passed and not passed and not passed option failed word and f	pon to ter gnificant". Company with simple ith simple ted under nted under persuasive ounted ur	the majorite majorite majorite in dise (signification of the majorite major	prity ty sposition sposition	GO TO	ant" D → (D) D → (C)	(D) GO TO →
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Disposition of Reject 2

	Original number of Negatives	(g)
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	# of Negatives	withd	rawn		(h)		
	# of Negatives t	found	I not related		(i)		
	# of Negatives	found	I not significant		(j)		
	Final		g -(h + i + j)=0	Reject is Not Valid denominator of § VI. Appr	d and is not included in the proval Conditions Check		
			g-(h+i+j)> 0	Reject is included in the denominator of § VI. Approval Conditions Check			
			Reject without a Negative	Not Valid			

Note: If all of the negative material included with a reject vote is withdrawn, determined to be not related, or determined to be not significant, the reject vote is not valid. (Regulations ¶ 9.4.3.3)

4.0 D		Not approved
A&R	Re	eason:

Reject 3 (Larry Hartsough, U.A.Associates) Negative 1 of Reject 3

	gativo i oi itojo										
	Referenced										
	Section										
Negative	Reason	sta Be wi	The Location for TC Chapter adjudication is not listed in the background statement of the Letter Ballot and it must be. See Regulations 9.5. Because of this, even if the document is approved during adjudication, it will fail procedural review. The venue, such as Hotel or Conference Center name, is sufficient to list in the Location box.								
	Withdrawal		No withdra	awal made		GO TO "Related" section					
	withdrawai		Withdrawa	GO TO "Final" → (A)							
			"Related"	is mutually agreed upon.							
	Motion and		*This motion can be appended to the motion for Persuasive Persuasive Section)								
	Reason		Negative is related (needs over 1/3 votes to pass)								
			Negative i	s not related (needs 2/3 or n	nore votes to p	ass)					
l _			Reason	XXXX		,					
}el:	Motion by/2nd by	Na		any)/Name (Company)							
Related	yy			cation information misse	d for some re	asons and we will					
Q	Discussion			next version.	G 101 001110 10	accine and we will					
			rtsough:								
			(-XX								
	Result of Vote (check ONE)		[Negative	is related] > 1/3	00 TO "D						
	(CHECK ONE)		[Negative	is not related] < 2/3	GO TO "Persເ	iasivė"					

				2/3=	< [Ne	egative is not rel	ated]	GO ТО	"Final"	" → (B)	
				Nega	ative	is related and p	ersuasive (n	eeds ove	r 1/3 vo	tes to pa	iss)
		tion and leason		Nega	ative	is related and n	ot persuasive	e (needs	2/3 or n	nore vote	es to pass)
	-			Reas	son	XXXX					
		n by/2nd by	Na	me (C	Comp	any)/Name (Co	mpany)				
	Dis	cussion									
ers			XX	(-XX							
Persuasive				[Neg	jative	is related and p	persuasive] >	1/3		GO TO	"Final" →
/e	Resu	ult of Vote		[Neg	Negative is related and not persuasive] < 2/3						
	(che	eck ONE)		2/3=	<[Ne	gative is related	and not pers	suasive] <	:90%	GO TO	"Final" →
				90% =< [Negative is related and not persuasive]						GO TO Significa Option"	"Not nt Finding
Not Significant Finding Option	This option can o vote equal to or g 9.5.3.3.2)			eater	thar	1 90% of the p	ersons vot	ing on th	ne actio	on". (Re	
ant Fi				It is mutually agreed upon to term the negative "not sign						(D) GO TO →	
ndin				It is mutually agreed upon to term the negative "significar The negative is "not significant".						ant	(C)
g Op		/lotion									
tion	Motio	n by/2nd by	Na	· ·		pany)/Name (Co			00.74	2 \ (5)	
		Vote				otion passed wit		•		D → (D)	
						otion failed with	simple majo	rity	GO TO	o → (c)	
			Ne	gative			1 1 1	l' 'd'	`		
				(A)		ndrawn (counted			<u> </u>		
		_		(B) (C)		related (counted		•)		
	Fi	nal		(D)		significant (cou	<u>`</u>		tion)		
				(E)		ited and persuas		CUMENT			
						t generated. See					
		Not ap	nro	<u> </u>		- 30	20				
A	&R	Reason:	ριο	veu							
	Reason:										

Negative 2 of Reject 3

gat	Referenced	Qmc-Si wafer was classified by this guide, of which the largest grain orientation needs
] #	Section	to be defined to <100> with certain tolerance of degree.

	Reason	Sec	in orientati	s two problems. First on be <100>. A Gu wafer orientations ap able 2, row 1.4. Del	ide cannot have rec pear to be classifie	quirements. In the Guide, as
	Withdrawal		No withdra	val made		GO TO "Related" section
	Withdrawai		Withdrawa	document received by	staff on XXXX	GO TO "Final" → (A)
		-		mutually agreed upon.		
	Motion and		*This mot Persuasive	on can be appended Section)	d to the motion f	or Persuasive (See
	Reason		Negative is	related (needs over 1/	3 votes to pass)	
				not related (needs 2/3	or more votes to p	ass)
	Matian bulonda	Mari		XXXX		
	Motion by/2nd by	_		y)/Name (Company) .2:" wafer was	classified by this	guide of which
Related	Discussion	It is Gu wit say	rtain toleral scription at suitable to viated from cond, we will the condition of the condi	ain orientation need note of degree. "We see a Limitation paragraph 3.2 is a series of solution of the classification of the classif	e are considering sified method in the largest grain tolerance of deg Table 2. clarification: table"? Is it that es not apply for vimum deviation fill applies? Is it that? orientation for querion, or reasons, contagraph 3.2 that states with a larges that is what you	to change the this guide was norientation ree." And for the the wafers that do not rom <100> within ne +/- 5 degrees mc-Si strongly asons or for some ould be part of the tates that: This st grain orientation

			XX	<-XX					
				[Neg	ative is related] > 1/3				
		ult of Vote		[Nec	[Negative is not related] < 2/3		Jasive"		
	(che	eck ONE)		<u> </u>	<pre>< [Negative is not related]</pre>	GO TO	GO TO "Final"		
				2/0=	2/3=< [Negative is not related]			<i>y</i> (B)	
						, .	1.10		
	Мо	tion and		Ŭ	ative is related and persuasi				
	R	Reason		_	ative is related and not persu	lasive (needs	2/3 or n	nore vote	es to pass)
	Motio	n by/2nd by	No	Reas	son XXXX Company)/Name (Company)				
		cussion	INC	ine (C	company)/Name (Company)				
P	DIS	CUSSION	VV	(-XX					
ersu			^^						
Persuasive				[Neg	ative is related and persuas	ive] > 1/3			"Final" →
Ve	Resi	ult of Vote		[Neg	ative is related and not pers	uasive] < 2/3		(E)	
	(check ONE)			2/3=<[Negative is related and not persuasive] <90%			GO TO "Final" → (C)		
				90%	90% =< [Negative is related and not persuasive]			GO TO "Not Significant Finding Option"	
Not Significant Finding Option	This option can only be used "if the committee finds a negative not persuasive vote equal to or greater than 90% of the persons voting on the action". (Regulatio 9.5.3.3.2)								
ificar				It is	mutually agreed upon to tern	n the negative	"not sig	nificant"	GO TO →
nt Fin				It is	mutually agreed upon to tern	n the negative	"signific	ant"	GO TO →
ding	N	Motion		The	negative is "not significant".				(C)
Opti	Motio	n by/2nd by	Na	me (C	Company)/Name (Company)				
S								D → (D)	
		Vote					O → (C)		
	Final			gative	•	,		- / (-)	
				(A)	withdrawn (counted under	h in disposition	n)		
				(B) not related (counted under i in disposition)					
				(C)	related and not persuasive	(significant)			
				(D)	not significant (counted und	der j in disposi	ition)		
				(E) related and persuasive DOCUMENT FA		T FAILS			
				Com	ment generated. See comm	ent #x			
		Not ap	pro	ved					
F	A&R	Reason:							

Disposition of Reject 1

	Original numbe	r of N	(g)			
	# of Negatives	withd	rawn		(h)	
	# of Negatives f	ound	I not related		(i)	
	# of Negatives f	ound	I not significant	(j)		
	Final		g -(h + i + j)=0	Reject is Not Valid denominator of § VI. Appro	and is not included in the oval Conditions Check	
			Final g-(h+i+j)>0		Reject is included in the denominator of § VI. Approval Conditions Check	
			Reject without a Negative	Not Valid		

Note: If all of the negative material included with a reject vote is withdrawn, determined to be not related, or determined to be not significant, the reject vote is not valid. (Regulations \P 9.4.3.3)

AOD	Not approved
A&R	Reason:

IV. Comments

	Referenced Section			*TF/Committee to fill in if necessary		
Com	From			Larry Hartsough, UA Associates		
Comment		Com	ment	I suggest that the China PV TC Chapter cooperate with the NA TC Chapter to arrange technical editing <u>before</u> going to Letter Ballot.		
	ı	Discu	ıssion			
		The	commit	tee agreed to do one of the following actions.		
		*No	motion	is required in this step.		
			No furth	er action was taken by the committee.		
			Refer to	the task force for more consideration.		
		New Business				
S			Other			
Action proposed	Editorial Change					
			Case 1:	No vote in this section :		
			To be in	cluded and voted on in <u>§ 5. Summary of Editorial Changes</u> .		
			Case 2:	Voted in this section :		

		inal section number and at least one full sentence are required in "FROM" and 'fields.				
	FRC	M: Section xxx				
1	To:	Section xxx				
	Jus	Justification (If necessary)				
	FROM: Section xxx					
2	То:	Section xxx				
	Jus	ification (If necessary)				
Motion	by/2nd	Name (Company)/Name (Company)				
Vo	te	XX-XX Motion passed (or failed)				
A&R	1	lot approved				
Adit	Reas	Reason:				

	F		enced ction	*TF/Committee to fill in if necessary			
		Fr	om	Larry Hartsough, UA Associates			
Comment			nment	The convention for different types of wafer should be followed: monocrystalline silicon (m-Si) and crystalline silicon (c-Si) are already in common use. Therefore use quasi-monocrystalline silicon (qmc-Si). Do not use the terms single crystalline silicon or multi-crystalline silicon. The term multicrystalline (no hyphen) is used in the COT as an adjective for the material you describe. However, is it possible that mc-Si might be confused with m-Si? Is it possible that the term polycrystalline silicon (p-Si) could be used? The distinction, according to the COT, is made on the basis of grain size and how it is formed.			
	Discussion						
	The commi		e commit	tee agreed to do one of the following actions.			
Pr ,		*No	motion	is required in this step.			
ACTION			No furth	er action was taken by the committee.			
S O			Refer to	the task force for more consideration.			
٢			New Bu	siness			
			Other				

	Editorial Change						
			Case '	1: No vote in this section :			
			To be	included and voted on in § 5. Summary of Editorial Changes.			
			Case 2	2: Voted in this section :			
			Origin "TO"	al section number and at least one full sentence are required in "FROM" and fields.			
			FROM: Section xxx				
		1	To: Section xxx				
			Justification (If necessary)				
			FROM	II: Section xxx			
		2	To: Section xxx				
			Justification (If necessary)				
Λ	/lot	ion b	y/2nd	Name (Company)/Name (Company)			
		Vot	е	XX-XX Motion passed (or failed)			
	A&	R	No	ot approved			
	AU	11	Reaso	on:			

	Referenced Section	*TF/Committee to fill in if necessary		
	From	Larry Hartsough, UA Associates		
Comment	Comment	There is a problem with the definition of "large" as used throughout this document, as it is not quantifiable. I am unfamiliar with the grain size distributions in a 'typical' qmc-Si wafer. If it is typically a bipolar distribution, then a definition referencing that may be appropriate. Another suggestion is that the 'largest single grain' [area] is defined as the orientation of the grains that have the largest sum of the areas of the n (5?) largest grains having the same orientation.		
	Discussion			
	The committee agreed to do one of the following actions.			

		*No	motio	n is required in this step.		
		140		ther action was taken by the committee.		
				to the task force for more consideration.		
				dusiness		
			Other	usiness		
			Otrici			
	Editorial Change					
	oria					
	l Ch					
	anç					
	Je					
			Case	1: No vote in this section :		
∖cti			To be	included and voted on in § 5. Summary of Editorial Changes.		
on						
pro			Case 2: Voted in this section :			
Action proposed				Original section number and at least one full sentence are required in "FROM" and TO" fields.		
			FROM: Section xxx			
		1	To: Section xxx			
			Justif	ication (If necessary)		
			FROM	1: Section xxx		
		2	To: S	ection xxx		
			Justif	ication (If necessary)		
N	Vot	ion b	y/2nd	Name (Company)/Name (Company)		
		Vote	•	XX-XX Motion passed (or failed)		
	A&	D	No	ot approved		
,	Αα	Reaso		n:		

2	Referenced Section	*TF/Committee to fill in if necessary
, <u>a</u>	From	Larry Hartsough, UA Associates

	Comment		nment	§ 6 Terminology , needs to follow the format defined in PG and SM. Not all terms relating (¶ 6.1) are found in SEMI M59. For instance, the COT list 'brick' as being defined in PV9. ¶6.3 should be <i>Abbreviations and Acronyms</i> and sould contain the sc-Si, m-Si, qmc-Si, etc. The <i>Definitions</i> could include brick [PV9].					
	ſ	Discu	ussion						
		The	e commi	ttee agreed to do one of the following actions.					
		*No	motion	is required in this step.					
			No furth	No further action was taken by the committee.					
			Refer to	the task force for more consideration.					
			New Bu	siness					
			Other						
	Editorial Change								
Act			Case 1:	No vote in this section :					
ion p			To be in	ncluded and voted on in § 5. Summary of Editorial Changes.					
rop			Case 2: Voted in this section :						
Action proposed			Origina "TO" fi	section number and at least one full sentence are required in "FROM" and elds.					
			FROM:	FROM: Section xxx					
		1	To: Se	Section xxx					
			Justific	cation (If necessary)					
			FROM:	Section xxx					
		2	To: Section xxx						
			Justific	cation (If necessary)					
ı	Vloti	ion b	y/2nd	Name (Company)/Name (Company)					
		Vot	е	XX-XX Motion passed (or failed)					
	A Q !	D	Not	approved					
	A&R		Reason	n:					

	Referenced Section			*TF/Committee to fill in if necessary					
	From			Larry Hartsough, UA Associates					
Comment	Comment			Edition comments.					
	ı	Disc	ussion						
		Th	e commit	tee agreed to do one of the following actions.					
		*No	motion i	is required in this step.					
			No furth	er action was taken by the committee.					
			Refer to	the task force for more consideration.					
			New Bus	siness					
			Other						
A	Editorial Change								
Ιŧi	Case			: No vote in this section :					
Action proposed			To be in	cluded and voted on in <u>§ 5. Summary of Editorial Changes</u> .					
Soc			Case 2:	Voted in this section :					
ed			Original "TO" fie	section number and at least one full sentence are required in "FROM" and elds.					
			FROM:	Section xxx					
		1	To: Sec	etion xxx					
			Justific	ation (If necessary)					
		•	FROM:	Section xxx					
		2	To: Sec	etion xxx					

	Justification (If necessary)					
Motion b	y/2r	nd Name (Company)/Name (Company)				
Vote			XX-XX Motion passed (or failed)			
A&R		No	ot approved			
Adil	Re	Reason:				

V. Summary of Editorial Changes
Note: Original section number and at least one full sentence are required in "FROM" and "TO" fields.

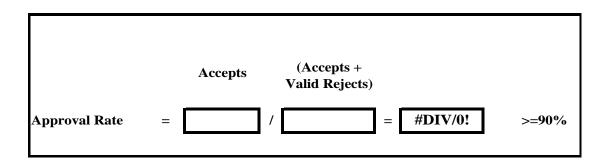
	FROM: Section XXX								
1	TO: Section XXX								
	Justi	Justification: (If necessary)							
	FROI	FROM: Section XXX							
2	TO: \$	TO: Section XXX							
	Justification: (If necessary)								
N	lotion		To approve the above editorial changes						
	Motion by/2nd by		Name (Company)/Name (Company)						
Dis	scussion		XXXX						
	Vote		XX-XX Motion passed (or failed)						
Λ.	&R		Not approved						
A	XIX	Reason:							

VI. Approval Conditions Check

APPROVAL CONDITION 1: All negatives have been discussed and were withdrawn, found not related, or not persuasive. (Regulations ¶ 9.6.2)

APPROVAL CONDITION 2: At least 90% of the sum of the valid accept and reject votes must be accept. (Regulations ¶ 9.6.3)

Note: if both approval conditions are not satisfied, the document fails.



A&R		Not approved
ACIT	Re	eason:

VII. Safety Check
See § 14 of the Regulations for further information

_	oce § 14 of the Regulations for further information							
Motion:			This is not a Safety Document: when all safety-related information is removed, the document is still technically sound and complete.					
		This is a Safety Document: when all safety-related information is removed, the document is not technically sound and complete.						
	Safety Checklist (Regulations ¶ 14.3) is complete and has been included with the document throughout the balloting process.							
N	/loti	on b	y/2nd by	Name (Company)/Name (Company)				
	D	iscı	ussion	XXXX				
		V	ote	XX-XX Motion passed or failed				
	A&F	2	Not a	pproved				
	AGI		Reason:					

VIII. Intellectual Property Check

Note: This ballot may be all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See § 15 of the Regulations for further information

	The meeting chair asked those present in person or by electronic link, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline.								
			ootentially n known	naterial	patented technology or copyrighted items	GO TO SECTION IX			
		knov	entially mate wn but a Le n material h	GO TO SECTION IX					
		Potentially material patented technology or copyrighted items are known but an LOA or copyright release for some of the material(s) has NOT been obtained or presented to the committee							
	M		Ask ISC f	Ask ISC for special permission to publish					
	MOTION		Quit activ	Quit activity					
)N		Wait for L	OA for patented technology or release of copyrighted items.					
	Motion by/2 nd by			Name (Company)/Name (Company)					
	[)iscu:	ssion	XXXX					
		Vo	te	XX-XX					
	_	Final Action			Motion Passed				
	Final Action				Motion Failed				
^	&R		Not appro	ved					
A	O(TX	Rea	son:						

IX. Action for this document

		nent passed committee review as balloted and will be forwarded to the A&R for review.								
Motion		This document passed committee review with editorial changes and will be forwarded to the A&R for procedural review.								
		Thi	This document failed committee review and will be returned to the task force for rework.							
		Thi	is do	cum	nent failed committee review and work will be discontinued.					
ı	Motio	otion by/2nd by		k	Name (Company)/Name (Company)					
	Dis	scussion			XXXX					
	1	Vote			XX-XX					
	Fins	inal Action			Motion passed					
	1 1116			•	Motion failed					
	A&R Approved									

^{*} Note: Such potentially material patented technology or copyrighted items might have become known since the Standard or Safety Guideline was last reviewed, or might become relevant due to this ballot.

Not approved

Reason: