

# Solar cells

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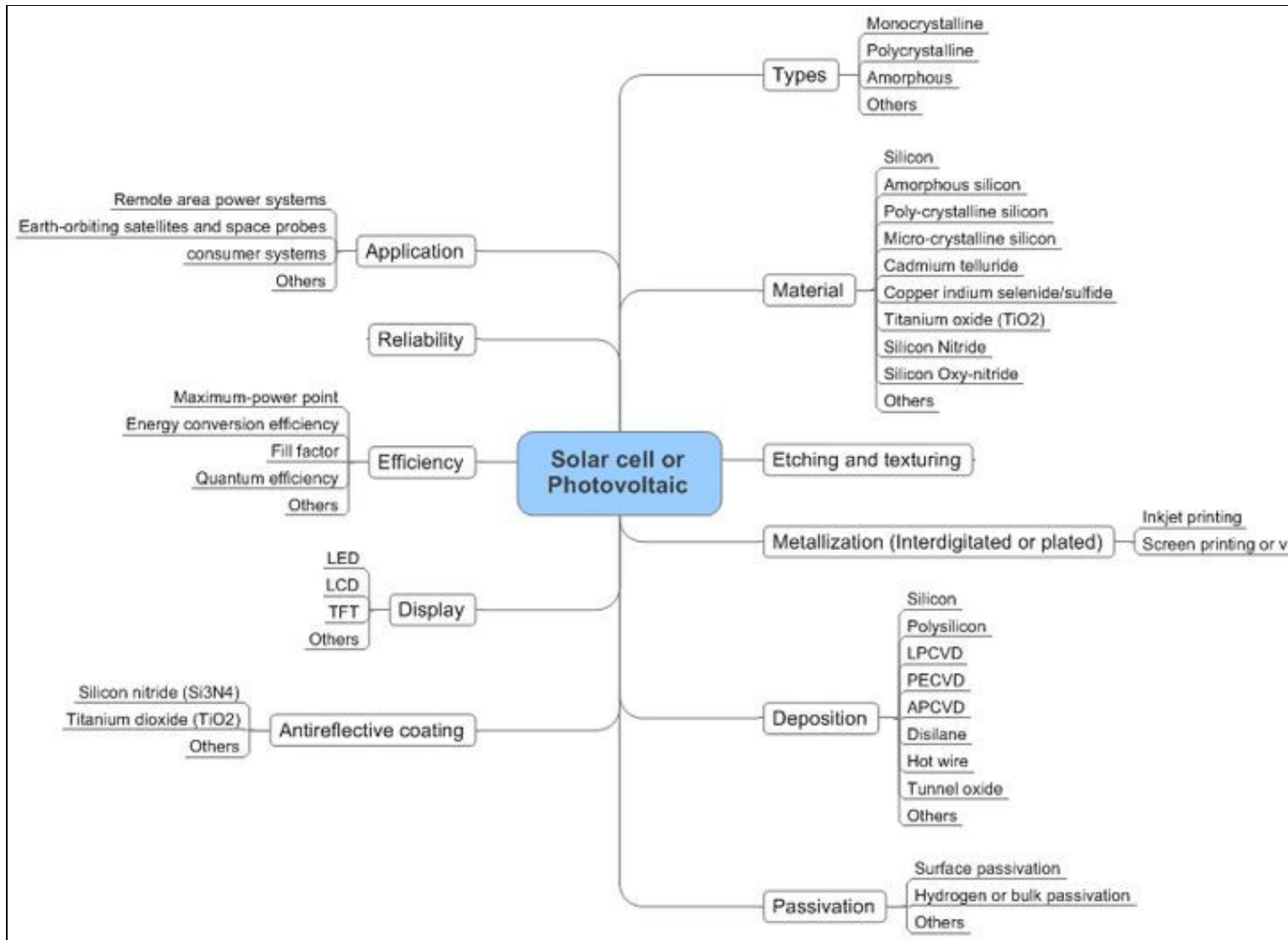
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## Summary

The project is about manufacturing procedures for solar cells. Based on the details given by the client and based on our study, we have conducted patent search and prepared the taxonomy

## Taxonomy

The patent documents will be clustered based on following taxonomy. More nodes could be added during patent analysis.



## Patent search strategy

**Database:** Micropat (full-text)

**Years:** 1836 to date

**Limitations: Assignee/Applicant:-** Sunpower OR Sanyo OR Sharp OR Q-Cells OR Suntech OR Motech OR BP Solar OR Kyocera OR Schott Solar OR RWE Schott OR ASE America OR Mobil Solar OR Solarworld OR Shell Solar OR Ersole OR Advent OR Isophoton OR Photowatt OR Mitsubishi Electric OR Honda

Query	Search queries	Hits
1	(((solar adj1 cell) or photovoltaic) and black and appearance)	10
2	(((solar adj1 cell) or photovoltaic) and ((Back adj1 junction) or (Back adj1 contact)))	75

3	(((solar adj1 cell) or photovoltaic) and ((Doped or APCVD) and oxid*))	328
4	(((solar adj1 cell) or photovoltaic) and ((Plated or Interdigitated) or metallization or seed layer))	189
5	(((solar adj1 cell) or photovoltaic) and ((Tunnel adj1 junction) or PolySilicon or (Amorphous adj1 silicon) or (Silicon adj1 Nitride) or (Oxy adj1 nitride) or TiO2 or (titanium adj1 oxide)))	970
6	(((solar adj1 cell) or photovoltaic) and (((inkjet or (screen adj1 print)) and pattern*) or resist))	228
7	(((solar adj1 cell) or photovoltaic) and ((Silicon adj1 Heterojunction*) or heterojunction* or (hetero adj1 junction*)))	102
8	(((solar adj1 cell) or photovoltaic) and ((Random or Upright or Tilted) and Textur*))	26
9	(((solar adj1 cell) or photovoltaic) and ((Light adj1 Trapping) or (Internal and (reflection or refraction or optics))))	91
10	(((solar adj1 cell) or photovoltaic) and ((Single adj1 sided adj1 etching) or Photoluminescence or Electroluminescence))	15
11	(((solar adj1 cell) or photovoltaic) and (Characterization or (Rapid adj1 Thermal adj1 Processing) or (auto adj1 lines) or ((surface or hydrogen) and passivation)))	120
12	(((solar adj1 cell) or photovoltaic) and (LED or (light adj1 emitting adj1 diode) or LCD or (liquid adj1 crystal adj1 diode) or TFT or (thin adj1 film adj1 transistor)))	199
13	(((solar adj1 cell) or photovoltaic) and (((Poly adj1 Silicon or polysilicon or silicon or tunnel adj1 oxide) and deposition) or LPCVD or (Low adj1 Pressure adj1 Chemical adj1 Vapour adj1 Deposition) or PECVD or (Plasma adj1 Enhanced adj1 Chemical adj1 Vapor adj1 Deposition) or (hot adj1 wire) or APCVD or (Atmospheric adj1 pressure adj1 chemical adj1 vapor adj1 deposition) or disaline or reliability)))	730
14	Final query = 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	1007

Total number to patents = 1007 (After removing patent families)

## Scientific Literature Search

### Database

**Scitation** is the re-launch of the Online Journal Publishing Service (OJPS), a leader in online sci-tech publishing and journal hosting since 1996 - American Institute of Physics

### Search Date

01-Jan-2007 till 15 May 2007

### Search string

(((solar cell <IN> (abstract,title,keywords)) <accrue>(photovoltaic <IN> (abstract,title,keywords)))) <AND> usdate >=1-jan-2000 <AND> usdate <=15-may-2007 - **2040 Hits**