CLAIMS

1. A composition of an active layer of an organic photovoltaic cell comprising:

- an electron-donating material consisting of a conjugated polymer;
- an electron-accepting material;

characterized in that the active layer comprises a block copolymer having linear architecture selected from the group consisting of poly(3-hexylthiophene-*b*-isoprene), poly(3-hexylthiophene-*b*-styrene), poly(styrene-*b*-isoprene) or poly(3-hexylthiophene-*b*-(4-vinylpyridine)) ~~comprising~~:

~~• from two to five blocks, including at least two blocks of different chemical nature;~~

~~• two consecutive blocks being of different chemical nature;~~

~~• each block exhibiting a molar mass of between 500 g/mol and 50 000 g/mol;~~

~~•~~ wherein none of the~~said~~ blocks in said block copolymer is ~~being~~ bonded by a covalent bond to the electron-accepting material.

2. The composition as claimed in claim 1, characterized in that the abovesaid copolymer comprises a single block consisting of a conjugated polymer.

3. The composition as claimed in claim 2, characterized in that the conjugated polymer forming the electron-donating material and/or the abovesaid single block consisting of a conjugated polymer of the block copolymer consists of poly(3-hexylthiophene).

4. The composition as claimed in any one of the preceding claims, characterized in that the electron-accepting material consists of at least one fullerene, preferably methyl [6,6]-phenyl-C_{61}-butanoate (MPCB).

5. The composition as claimed in any one of the preceding claims, characterized in that at least one of the blocks of the abovesaid copolymer consists of a polystyrene.

6. The composition as claimed in any one of the preceding claims,

characterized in that at least one of the blocks of the abovesaid copolymer consists of a polyalkyl acrylate, preferably poly(n-butyl acrylate), or of a polyisoprene.

7. The composition as claimed in any one of the preceding claims, characterized in that at least one of the blocks of the abovesaid copolymer exhibits a Tg of less than 0°C, preferably of between -120°C and -50°C.

~~8. The composition as claimed in any one of the preceding claims, characterized in that the block copolymer consists of poly(3-hexylthiophene-*b*-isoprene), poly(3-hexylthiophene-*b*-styrene), poly(styrene-*b*-isoprene) or poly(3-hexylthiophene-*b*-(4-vinylpyridine)).~~

8~~9~~. The use of the composition as claimed in any one of the preceding claims in the organic photovoltaic cells of a photovoltaic module.

9~~10~~. A photovoltaic module exhibiting at least one layer forming an encapsulant comprising a photovoltaic cell, consisting of a plurality of individual organic photovoltaic cells each comprising an active layer capable of generating electrical energy, and a layer forming a back sheet, the composition of said active layer is as claimed in any one of claims 1 to 7~~8~~.