Summary ~~of the invention~~:

~~The present invention relates to~~In an aspect, there is provided a process for the concomitant synthesis of PEDOT and of electrolytic (co)polymer, comprising the following successive steps:

- preparation of a solution of water and of ionic monomer with stirring at a temperature of between 15 and 25°C in a reactor,
- introduction of a solution of EDOT predissolved in a solvent,
- stirring until dissolved,
- introduction of a solvent-nonionic monomer dispersion,
- stirring until the resulting dispersion has turned white,
- heating to a temperature of between 35 and 55°C,
- introduction of a solution of initiator and of the remaining EDOT,
- continuation of the stirring and heating in parallel with the continuous or semi-continuous introduction of the solution of the remaining EDOT and of initiator.

It is clearly understood that this process may comprise other preliminary or intermediate steps or steps subsequent to those above.

In another aspect, there is provided a latex obtained in the process as defined above.

In another aspect, there is provided the use of a latex as defined above, for dispersing nanofillers.

In another aspect, there is provided a conductive transparent film obtained as defined above.

In another aspect, there is provided the use of the transparent film as defined above in optoelectronic applications, especially in photovoltaic organic cells.

Detailed description:

The term "concomitant polymerization of a composite latex of poly(3,4-ethylenedioxythiophene) and of electrolytic (co)polymer" means a polymerization in which the monomers 3,4-ethylenedioxythiophene (EDOT) and the precursor monomers of the electrolytic (co)polymer are simultaneously polymerized using the same initiator.