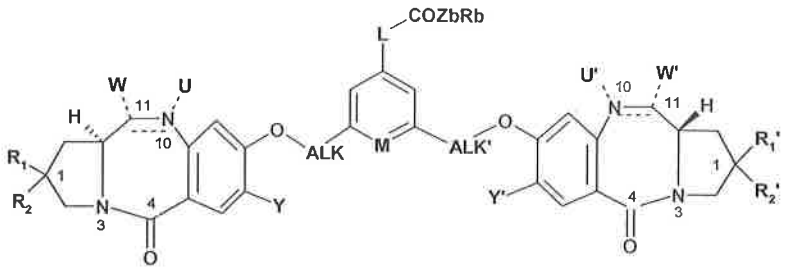
## CLAIMS

1. Compound of formula (I):




(I)

in which:

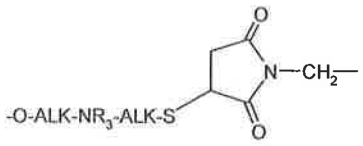
- ---- / —— represents a single bond or a double bond with the condition that, if ---- / —— represents a single bond, then:
  - ❖ ---- represents a single bond;
  - ❖ **U** and **U'** each represents H;
  - ❖ **W** and/or **W'**, which are identical or different, represent(s), independently of one another: OH, -OR, –OCOR, -COOR, -OCOOR, –OCONRR', a cyclic carbamate such that N10 and C11 are included in a ring, –NRCONRR', -OCSNHR, a cyclic thiocarbamate such that N10 and C11 are included in a ring, -SH, -SR, -SOR, -SOOR, $-SO_3^-$, -NRSOOR', –NRR', a cyclic amine such that N10 and C11 are included in a ring, -NROR', -NRCOR', $-N_3$, -CN, Hal or a trialkylphosphonium or triarylphosphonium group;
- **$R_1$**, **$R_2$**, **$R_1$'** and **$R_2$'**, which are identical or different, represent, independently of one another: H, Hal or a ($C_1$-$C_6$)alkyl group optionally substituted by one or more substituent(s) chosen from: Hal, CN, NRR', $CF_3$, OR, an aryl or heteroaryl group, or $S(O)_qR$ with q = 0, 1 or 2;

or else

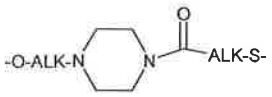
- **$R_1$** and **$R_2$** and/or **$R_1$'** and **$R_2$'** together form respectively a double bond $=CH_2$ or $=CH-CH_3$;
- **Y** and **Y'**, which are identical or different, represent, independently of one another, H or OR;
- **M** represents CH or N;
- **ALK** and **ALK'**, which are identical or different, represent, independently of one another, a ($C_1$-$C_6$)alkylene group;
- **R** and **R'** represent, independently of one another, H or a ($C_1$-$C_6$)alkyl or aryl group ~~optionally substituted by one or more substituent(s) chosen from: Hal, CN, NRR', $CF_3$, OR or an aryl or heteroaryl group~~;
- **L** represents:

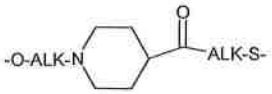
❖ the $-L_1-L_2-$ group in which $L_1$ is attached to the aromatic ring comprising **M** via the ALK or OALK group and represents one of the following groups:

-ALK-S-




-O-ALK-$NR_3$-ALK-S-







and $L_2$ represents the $-CH_2C(=O)-NR_3-(CH_2CH_2O)_i-ALK-$ group attached to $L_1$ via $-CH_2C(=O)-$;

or else

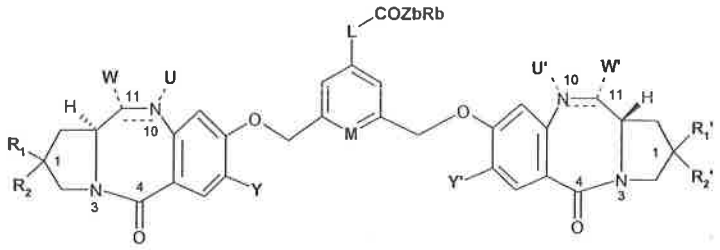
❖ the $-O-ALK-NR_3-ALK-S-(CH_2CH_2O)_i-ALK-$ group attached to the aromatic ring comprising **M** via the OALK group;

- $R_3$ represents H or a $(C_1-C_6)$alkyl group;
- **i** represents an integer ranging from 1 to 40, rather from 1 to 20, preferably from 1 to 10;
- $Z_b$ represents a single bond, -O- or -NH- and $R_b$ represents H or a $(C_1-C_6)$alkyl, $(C_3-C_7)$cycloalkyl, aryl, heteroaryl or $(C_3-C_7)$heterocycloalkyl group or else $Z_b$ represents a single bond and $R_b$ represents Hal;

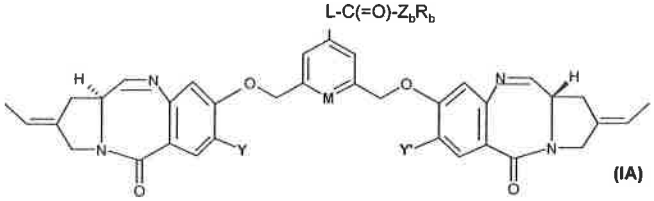
wherein :

- "aryl group" means a mono- or bicyclic aromatic group not comprising a heteroatom;
- "heteroaryl group" means a mono- or bicyclic aromatic group comprising at least one heteroatom (O, S, N) involved in the ring and connected to the carbon atoms forming the ring;
- "cycloalkyl group" means a cyclic alkyl group comprising between 3 and 8 carbon atoms involved in the cyclic structure; and
- "heterocycloalkyl group" means a cycloalkyl group comprising at least one heteroatom (O, S, N) involved in the ring and connected to the carbon atoms forming the ring .

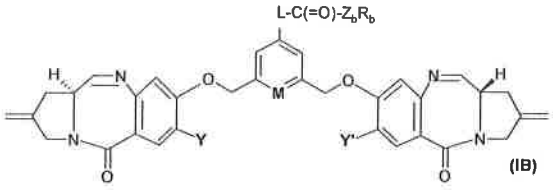
2. Compound according to Claim 1 of formula:



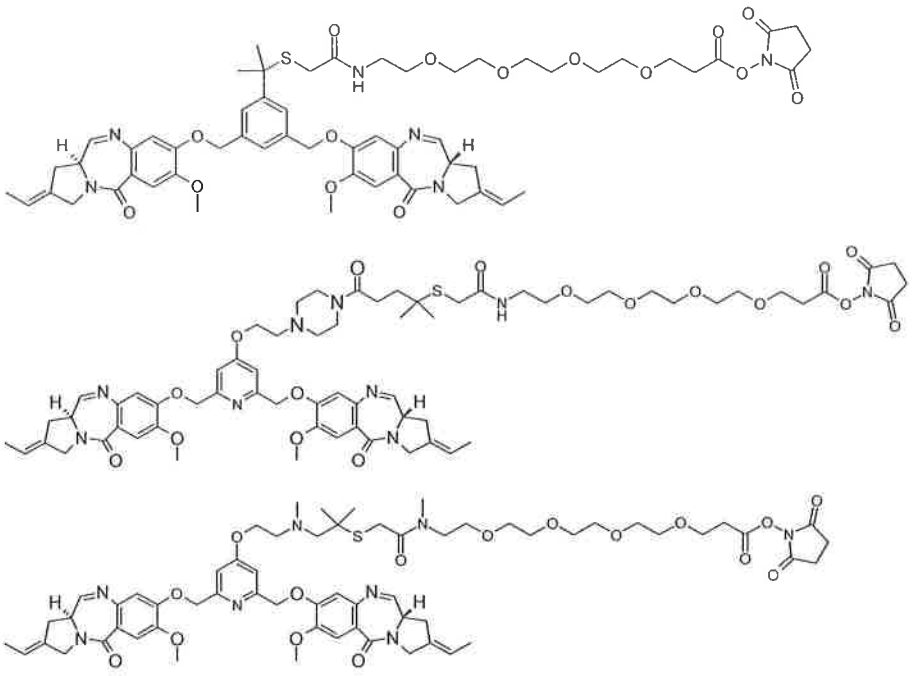

**3.** Compound according to Claim 1 of formula **(IA)** or **(IB)**:




**(IA)**




**(IB)**



**10.** Process for the preparation of a conjugate, consisting in:
(i) bringing into contact and allowing to react an optionally buffered aqueous solution of a binding agent and a solution of a compound as defined in one of Claims 1 to 9;
(ii) and then optionally separating the conjugate formed in stage (i) from the compound of formula (I) and/or from the binding agent not having reacted and/or from the aggregates which might be formed.

**11.** Process according to Claim 10, in which the $-C(=O)Z_bR_b$ group ~~is reactive~~reacts with ~~regard to~~ the chemical groups present on the binding agent, in particular with regard to the amino groups present on an antibody, ~~so as to ensure the attachment of the compound of formula (I) to the binding agent by~~and forms ~~formation of~~ a covalent bond.

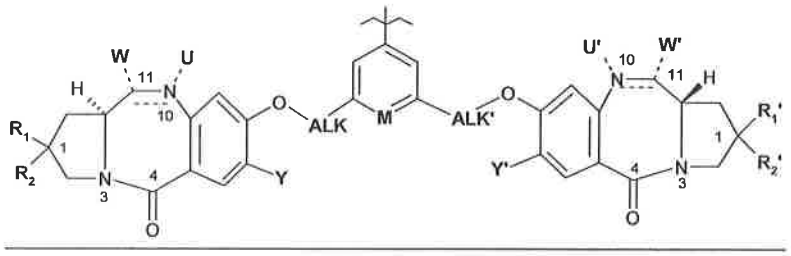
**12.** Process according to Claim 10 and Claim 11, in which stage (ii) consists in:
- separating the conjugate which has formed in stage (i) from the unreacted binding agent and from the aggregates possibly present in the solution;
or else
- separating the conjugate of stage (i) only from the unreacted compound of formula (I) and from the aggregates which might be formed and leaving in the solution the binding agent which might not have reacted.

**13.** Process according to one of Claims 10 to 12, in which the binding agent is a ligand, a protein, an antibody, more particularly a monoclonal antibody, a protein or antibody fragment, a peptide, an oligonucleotide or an oligosaccharide.

**14.** Process according to Claim 10 to Claim 13, in which the reaction takes place at a temperature of between 20 and 40°C and/or the duration of the reaction varies between 1 and 24 h.

**15.** Process according to one of Claims 10 to 14, in which, after stage (i) or (ii), the solution of the conjugate is subjected to a stage (iii) of ultrafiltration and/or of diafiltration.

**16.** Conjugate ~~capable of being obtained by the process according to one of Claims 10 to 15~~comprising a binding agent to which was covalently attached, in the position para to M, the dimer of formula :




**17.** Conjugate according to Claim 16, in which the binding agent is an antibody, preferably a monoclonal antibody, characterized by a mean DAR of between 1 and 10, preferably between 1.5 and 7,

the DAR being calculated by the equation DAR = $c_D/c_A$

with:

$c_D = [(e_{A\,LO1} \times A_{LO2}) - (e_{A\,LO2} \times A_{LO1})] / [(e_{D\,LO2} \times e_{A\,LO1}) - (e_{A\,LO2} \times e_{D\,LO1})]$

$c_A = [A_{LO1} - (c_D \times e_{D\,LO1})] / e_{A\,LO1}$

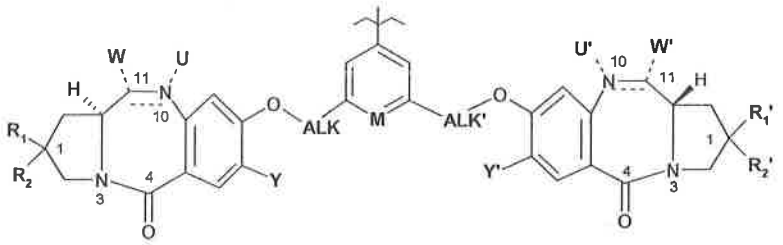
$A_{LO1}$ and $A_{LO2}$ denoting the absorbances of an aqueous solution of the conjugate at the wavelengths LO1 and LO2, measured on the corresponding peak of the SEC spectrum,

$e_{D\,LO1}$ and $e_{D\,LO2}$ respectively denoting the molar absorption coefficients of the pyrrolo[1,4]benzodiazepine dimer before conjugation at the two wavelengths LO1 and LO2;

$e_{A\,LO1}$ and $e_{A\,LO2}$ respectively denoting the molar absorption coefficients of the naked antibody at the two wavelengths LO1 and LO2,

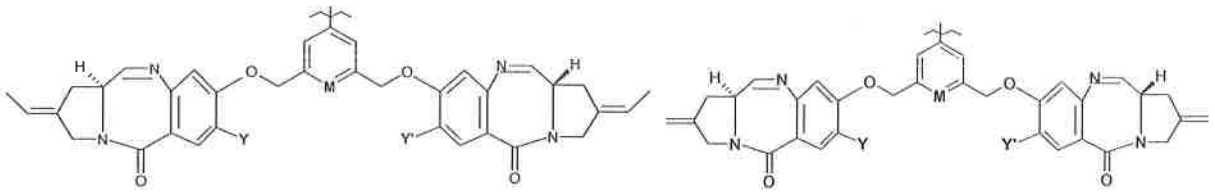
LO1 = 280 nm and LO2 = 320 nm.

**18.** Use of a compound according to one of Claims 1 to 9 in the preparation of a binding agent to which is covalently attached, in the position para to M, the dimer of formula:



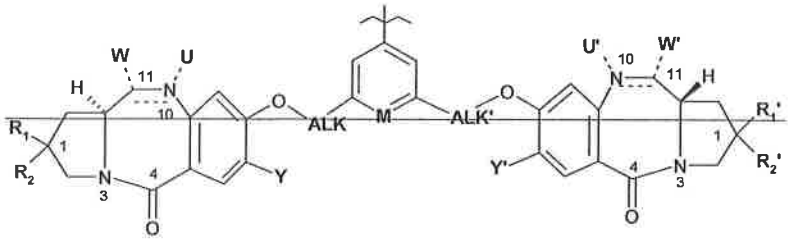

**19.** Use according to Claim 18, in which the binding agent is an antibody, preferably a monoclonal antibody.

**20.** Use according to Claim 18 or Claim 19, in which the dimer has the formula:



21. Use according to Claim 18 to Claim 20, in which **Y** and **Y'** represent a ($C_1$-$C_4$)alkoxy group, more particularly a methoxy group.

~~22. Binding agent to which was covalently attached, in the position para to M, the dimer of formula:~~



~~after reaction of a compound as defined in one of Claims 1 to 9 with the binding agent.~~

~~23. Binding agent according to Claim 22, in which the dimer is as defined in either of Claims 20 and 21.~~

~~24. Binding agent according to Claim 23, having affinity for an antigen or group of antigens located on cancer cells or stromal cells associated with a tumour.~~

~~25. Binding agent according to Claim 22 to Claim 24, which is an antibody, preferably a monoclonal antibody.~~

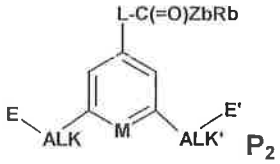
~~26. Solution of conjugate capable of being obtained by the process according to one of Claims 10 to 15.~~

~~27~~22. Compound according to one of Claims 1 to 9 for use as anticancer agent.

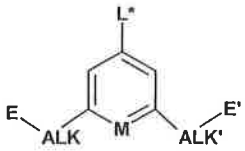
~~28~~23. Conjugate according to Claim 16 or Claim 17 for use as anticancer agent.

~~29~~24. Pharmaceutical composition comprising a compound according to one of Claims 1 to 9 or else a conjugate according to Claim 16 or Claim 17 and at least one excipient.

~~30~~25. Use of a compound of formula $\mathbf{P_2}$



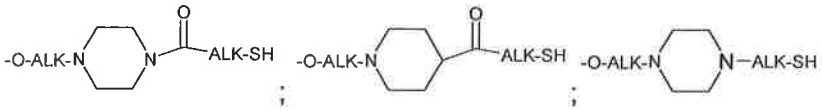

or else a compound of formula:




in which **L*** is chosen from:

-ALK-SH ;

-O-ALK-$NR_3$-ALK-SH ;



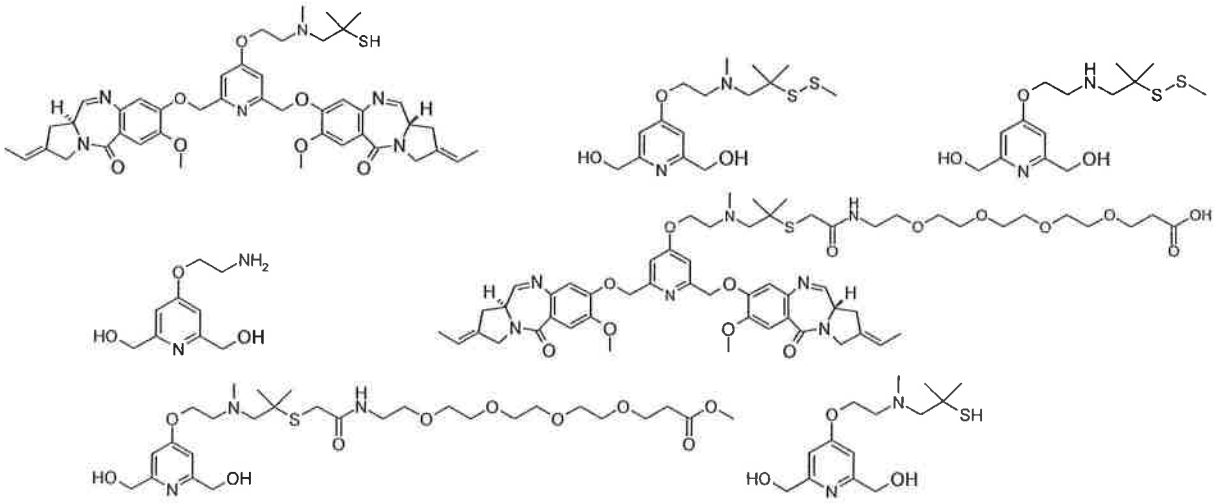

in which formulae:

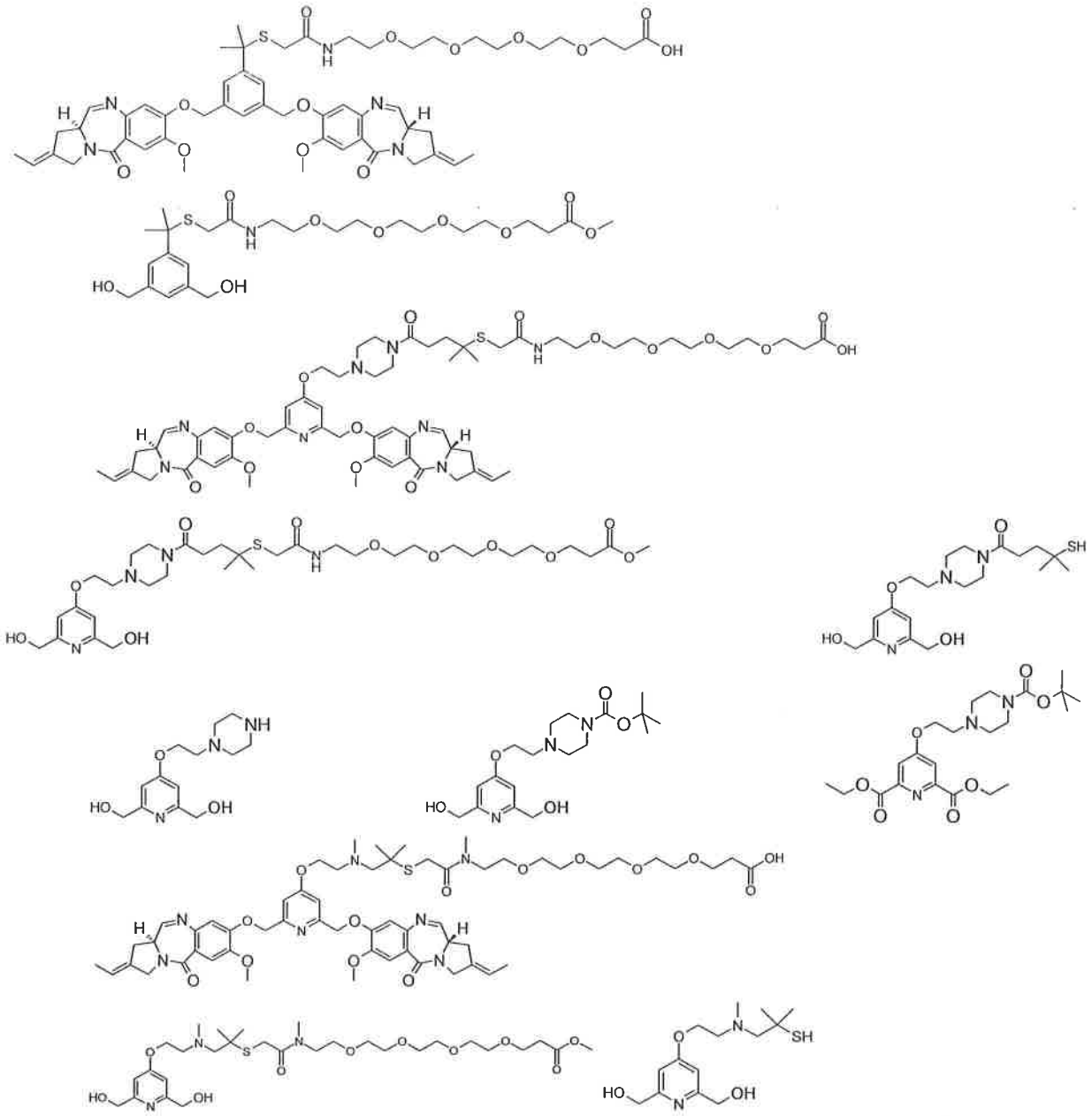
- L, M, ALK, ALK', $R_3$, $Z_b$ and $R_b$ are as defined in one of Claims 1 to 9;
- E and E' represent, independently of one another, an –OH group or a leaving group;

as intermediate in the preparation of a compound of formula (I) as defined in one of Claims 1 to 9.

**~~31~~26.** Use according to Claim ~~30~~25, in which the leaving group is chosen from a halogen atom or a mesylate, tosylate, nosylate or $-OPPh_3^+$ group.

**~~32~~27.** Use of a compound chosen from one of the following:





it being understood that the –COOH end functional group can be replaced by a -COO($C_1$-$C_6$)alkyl end functional group, in particular a –COOMe end functional group, and that the –SH end functional group can be replaced by a disulphide functional group, in particular an –SSMe functional group,

as intermediate in the preparation of a compound of formula (I) as defined in one of Claims 1 to 9.

**~~33~~28.** Use of a compound according to one of Claims 1 to 9 in the manufacture of an anticancer agent.

**~~34~~29.** Use of a conjugate according to Claim 16 or Claim 17 in the manufacture of an anticancer agent.