

WHAT IS CLAIMED IS:

1. A catalyst for an anode of a fuel cell, wherein the catalyst comprises, in at least partially reduced form, (i) nickel and (ii) molybdenum and, optionally, (iii) rhenium and/or (iv) at least one transition metal which is different from nickel, molybdenum and rhenium, supported on (v) electrically conductive carbon modified with one or more elements selected from the lanthanides, yttrium, tin, and titanium, the weight ratio (i) : ((ii) + (iii) + (iv)) being at least 2 : 1.
2. The catalyst of claim 1, wherein (iii) is present.
3. The catalyst of any one of claims 1 and 2, wherein (iv) is present.
4. The catalyst of claim 3, wherein (iv) comprises at least one of cobalt and tungsten.
5. The catalyst of any one of claims 1 to 4, wherein the lanthanide comprises at least one of cerium and lanthanum.
6. The catalyst of any one of claims 1 to 5, wherein the electrically conductive carbon is modified with cerium.
7. The catalyst of any one of claims 1 to 6, wherein the one or more elements modifying the electrically conductive carbon are at least in part present as oxides.
8. The catalyst of any one of claims 1 to 7, wherein the one or more elements modifying the electrically conductive carbon are present in a concentration of at least 0.5 % by weight, based on the total weight of modified electrically conductive carbon.
9. The catalyst of any one of claims 1 to 8, wherein the catalyst comprises at least 10 % by weight of (i), based on a total weight of (i) to (v).
10. The catalyst of any one of claims 1 to 9, wherein the catalyst comprises at least 0.5 % by weight of (ii), based on a total weight of (i) to (v).

11. The catalyst of any one of claims 1 to 10, wherein the catalyst comprises not more than 5 % by weight of (ii).
12. The catalyst of any one of claims 1 to 11, wherein the catalyst comprises at least 0.5 % by weight of (iii), based on a total weight of (i) to (v).
13. The catalyst of any one of claims 1 to 12, wherein the catalyst comprises not more than 5 % by weight of (iii).
14. The catalyst of any one of claims 1 to 13, wherein the catalyst comprises at least 50 % by weight of (v), based on a total weight of (i) to (v).
15. The catalyst of any one of claims 1 to 14, wherein the catalyst is substantially free of Pt, Pd, Ru, Ag, and Au.
16. An anode for a fuel cell, wherein the anode comprises the catalyst of any one of claims 1 to 15.
17. A fuel cell, wherein the fuel cell comprises the anode of claim 16.
18. A process for making the catalyst of any one of claims 1 to 15, wherein the process comprises impregnating component (v) with one or more solutions of compounds of nickel and molybdenum and, optionally one or more solutions of compounds of rhenium and/or one or more solutions of one or more compounds of transition metals which are different from nickel, molybdenum and rhenium, followed by an at least partial reduction of the metals present.