Commission Implementing Decision (EU) 2020/174 of 6 February 2020 on the approval of the technology used in 12 Volt efficient alternators for use in certain passenger cars and light commercial vehicles as an innovative technology pursuant to Regulation (EU) 2019/631 of the European Parliament and of the Council (Text with EEA relevance)

COMMISSION IMPLEMENTING DECISION (EU) 2020/174

of 6 February 2020

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO_2 emission standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011[(1)], and in particular Article 11(4) thereof,

Whereas:

(1) On 12 April 2019, the manufacturers Toyota Motor Europe NV/SA, Opel Automobile GmbH – PSA, FCA Italy S.p.A., Automobile Citroën, Automobile Peugeot, PSA Automobiles SA, Mitsubishi Electric Corporation, Audi AG, Ford Werke GmbH, Jaguar Land Rover Ltd, Hyundai Motor Europe Technical Center GmbH, Bayerische Motoren Werke AG, Renault SA, Honda Motor Europe Ltd, Volkswagen AG, Volkswagen Nutzfahrzeuge, Daimler AG, Denso Corporation and SEG Automotive Germany GmbH submitted a joint application ('the application') for the approval as an innovative technology of the technology used in 12 Volt efficient alternators for use in passenger cars and light commercial vehicles with internal combustion engine powertrains.

(2) The application has been assessed in accordance with Article 11 of Regulation (EU) 2019/631, Commission Implementing Regulations (EU) No 725/2011[(2)] and (EU) 427/2014[(3)] and the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council[(4)] (July 2018 version). In accordance with Article 11(3) of Regulation (EU) 2019/631, the application was accompanied by a verification report undertaken by an independent and certified body.

(3) The technology used in 12 Volt efficient alternators converting mechanical energy into electrical energy with a certain conversion efficiency rate has already been approved for use in passenger cars by Commission Implementing Decisions 2013/341/

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EU[(5)], 2014/465/EU[(6)], (EU) 2015/158[(7)], (EU) 2015/295[(8)], (EU) 2015/2280[(9)] and (EU) 2016/588[(10)] and for use in light commercial vehicles by Commission Implementing Decision (EU) 2018/1876[(11)] (jointly referred to as 'past approval Implementing Decisions') as an innovative technology capable of reducing CO_2 emissions in a way that is not covered by the measurements performed as part of the emissions test under the New European Driving Cycle set out in Commission Regulation (EC) No 692/2008[(12)].

(4) The application, however, refers to the new standard test procedure, the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) set out in Commission Regulation (EU) 2017/1151[(13)], and it is demonstrated that also the measurements performed as part of the emissions test under the WLTP do not cover the CO_2 savings resulting from the technology used in 12 Volt efficient alternators.

(5) Based on the experience gained from the assessment of applications concerning technologies that contribute to improving the efficiency of alternators in the framework of the past approval Implementing Decisions as well as on the reports and other information provided with the application, it has been satisfactorily and conclusively demonstrated that the technology used in 12 Volt efficient alternators meets the criteria specified in Article 11(2) of Regulation (EU) 2019/631 and the eligibility criteria specified in Article 9(1)(b) of Implementing Regulations (EU) No 725/2011 and (EU) No 427/2014.

(6) The application sets out a methodology for testing CO_2 savings from the use of the technology in 12 Volt alternators in passenger cars and light commercial vehicles. In addition to referring to the WLTP, that methodology differs from the testing methodology set out in the past approval Implementing Decisions, principally by the definition of the power consumption, the definition of the average speed and the use of a run-in procedure.

(7) It is appropriate to adjust the definitions of the power consumption and the average speed in order to take into account the WLTP. However, regarding the addition to the testing methodology of a run-in procedure for the alternator, the application does not set out with sufficient precision the details for how such run-ins should be performed nor how the run-in effects should be taken into account. Moreover, it is already integral to the existing testing methodology set out in the past approval Implementing Decisions that such effects may be taken into account, where necessary, by the requirement that the efficiency of the alternator must be measured at least five times. As the efficiency of alternators is determined on the basis of the average of the measurement results, any run-in effects, positive or negative, may therefore be adequately taken into account in the final efficiency determination, where necessary by increasing the number of measurements. Against that background, it is not appropriate to complement the testing methodology with an additional specific run-in procedure such as that proposed in the application.

(8) It is also appropriate to maintain the conversion efficiency rates at the same levels as those already approved by the past approval Implementing Decisions taking into account that no evidence has been provided to support that alternators with a lower

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conversion efficiency rate meet the market penetration requirement set out in Article 2(2)(a) of Implementing Regulations (EU) No 725/2011 and (EU) No 427/2014.

(9) Taking into account the above considerations, the adjusted testing methodology should be considered appropriate for determining the CO_2 savings from the innovative technology in question.

(10) Manufacturers should have the possibility to apply to a type-approval authority for the certification of CO_2 savings from the use of the technology in 12 Volt efficient alternators that meets the conditions laid down in this Decision. Manufacturers should for that purpose ensure that the application for certification is accompanied by a verification report from an independent and certified body confirming that the technology used in the 12 Volt efficient alternator complies with the conditions laid down in this Decision and that the savings have been determined in accordance with the testing methodology set out in this Decision.

(11) In order to facilitate a wider deployment of 12 Volt efficient alternators in new vehicles, a manufacturer should also have the possibility to submit a single application for the certification of the CO_2 savings from several 12 Volt efficient alternators. It is, however, appropriate to ensure that, where that possibility is used, a mechanism is applied that incentivises the deployment of only those alternators that offer the highest efficiency.

(12) It is the responsibility of the type-approval authority to thoroughly verify that the conditions for certifying the CO_2 savings from use of an innovative technology as specified in this Decision are met. Where the certification is granted, the type-approval authority should ensure that all elements considered for the certification are recorded in a test report and kept together with the verification report and that this information is made available to the Commission on request.

(13) For the purposes of determining the general eco-innovation code to be used in the relevant type-approval documents in accordance with Annexes I, VIII and IX to Directive 2007/46/EC of the European Parliament and of the Council[(14)], it is necessary to attribute an individual code to the innovative technology.

(14) From 2021, manufacturers' compliance with their specific CO_2 emissions targets is to be established on the basis of CO_2 emissions determined in accordance with the WLTP. CO_2 savings from the innovative technology certified by reference to this Decision may therefore be taken into account for the calculation of manufacturers' average specific CO_2 emissions from the calendar year 2021 onwards,

HAS ADOPTED THIS DECISION:

Article 1

Innovative technology

The technology used in 12 Volt efficient alternators intended for the conversion of mechanical energy into electrical energy is approved as an innovative technology within the meaning of Article 11 of Regulation (EU) 2019/631, taking into account that it is

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not covered by the standard test procedure set out in Regulation (EU) 2017/1151 and provided that the innovative technology conforms to the following conditions:

(a) it is fitted in internal combustion engine powered passenger cars (M1) and light commercial vehicles (N1);

(b) it is used solely to charge the vehicle battery and to power the electrical system of the vehicle when its combustion engine is running;

(c) it has an efficiency, i.e. a conversion rate from mechanical into electric power, of at least:

(i) 73,8 % for petrol-fuelled vehicles other than turbo-charged;

(ii) 73,4 % for turbo-charged petrol-fuelled vehicles;

(iii) 74,2 % for diesel-fuelled vehicles.

Article 2

Application for certification of CO_2 savings

1 A manufacturer may apply to a type-approval authority for certification of the CO_2 savings from the use of the technology approved in accordance with Article 1 (‘the technology’) in one or several 12 Volt efficient alternators by reference to this Decision.

2 The manufacturer shall ensure that the application for the certification is accompanied by a verification report from an independent and certified body confirming that the conditions set out in Article 1 have been met.

3 Where the savings have been certified in accordance with Article 3, the manufacturer shall ensure that the certified CO_2 savings and the eco-innovation code referred to in Article 4(1) are recorded in the certificates of conformity of the vehicles concerned.

Article 3

Certification of CO_2 savings

1 The type-approval authority shall ensure that CO_2 savings achieved from the use of the innovative technology have been determined using the methodology set out in the Annex.

2 Where a manufacturer applies for the certification of the CO_2 savings from the use of the technology in more than one 12 Volt efficient alternator in relation to one vehicle version, the type-approval authority shall determine which of the 12 Volt efficient alternators tested delivers the lowest CO_2 savings. That value shall be used for the purposes of paragraph 3.

3 The type-approval authority shall record the certified CO_2 savings determined in accordance with paragraph 1 or 2 and the eco-innovation code referred to in Article 4(1) in the relevant type-approval documentation.

4 The type-approval authority shall record all the elements considered for the certification in a test report and keep that together with the verification report referred to in Article 2(2), and shall make that information available to the Commission on request.

5 The type-approval authority shall only certify CO_2 savings, if it finds that the technology used in the 12 Volt efficient alternator or alternators comply with the conditions set

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out in Article 1, and if the CO_2 savings achieved are 0,5 g CO_2/km or higher as specified in Article 9(1)(b) of Implementing Regulation (EU) No 725/2011 in the case of passenger cars or of Implementing Regulation (EU) No 427/2014 in the case of light commercial vehicles.

Article 4

Eco-innovation code

1 The innovative technology approved by this Decision is attributed with the eco-innovation code No 29.

2 The certified CO_2 savings recorded by reference to that eco-innovation code may be taken into account for the calculation of the average specific emissions of manufacturers starting from the calendar year 2021.

Article 5

Entry into force

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Done at Brussels, 6 February 2020.

For the Commission

The President

Ursula VON DER LEYEN