

Title (en)
COMPRESSOR SYSTEM FOR PRODUCING COMPRESSED AIR

Title (de)
VERDICHTERANLAGE ZUR ERZEUGUNG VON DRUCKLUFT

Title (fr)
SYSTEME DE COMPRESSEUR POUR PRODUIRE DE L'AIR COMPRIME

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Application
EP 00993426 A 20001208

Priority

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Abstract (en)
[origin: WO0144635A1] The invention relates to a compressor system for producing compressed air. Said system is comprised of a compressor which is driven by an internal combustion engine, which is connected to compressed air tapping points via a line, and to which compressed air is supplied by an exhaust-driven turbocharger that is connected, on the drive side, to the exhaust side of the internal combustion engine. The overall efficiency of a machine of this type is improved by virtue of the fact that a first exhaust-driven turbocharger (20), which supplies compressed air to a diesel engine (40), and a second exhaust-driven turbocharger (21), which supplies compressed air to a fluid-injected displacement compressor (50), are arranged one behind the other on the exhaust side. An impeller dimension of the exhaust-driven turbocharger (20) that is found on the turbine, for example, the outer diameter of the impeller, is adapted to the exhaust gas back pressure and to the temperature resulting from the downstream exhaust-driven turbocharger (21) of the displacement compressor (50). In addition, an impeller dimension of the exhaust-driven turbocharger (21) that is found on the turbine, for example, the diameter of the impeller, is adapted to the different mass flow rates on the turbine side and on the compressor side of the exhaust-driven turbocharger (21).

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