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202322307085.5 2023年8月25日 (25.08.2023) CN
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- (81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN,

(54) Title: AIR INTAKE SYSTEM AND AIR COMPRESSION APPARATUS

(54) 发明名称: 进气系统和空压设备

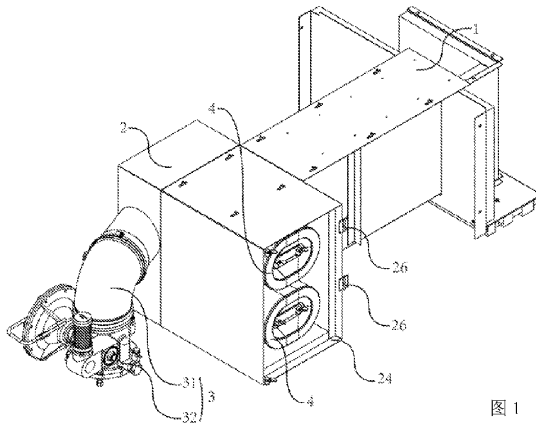


图 1

(57) Abstract: An air intake system and an air compression apparatus. The air intake system comprises: a noise-reduction channel, which is provided with an air inlet; a noise-reduction box, wherein a first cavity and a second cavity, which are spaced apart, are formed in the noise-reduction box, the first cavity is in communication with the noise-reduction channel, an air filter structure is provided in the first cavity, an inlet of the air filter structure is in communication with the first cavity, an outlet of the air filter structure is in communication with the second cavity, and at least one of the first cavity and the second cavity is configured as a noise-reduction cavity; and a connecting pipe assembly, which is in communication with the second cavity and is configured to be in communication with an air consumption component. By means of providing the connected noise-reduction channel and noise-reduction box in the air intake system, air is subjected to multiple instances of noise reduction, thereby reducing the volume of noise generated by the air intake system, and the problems of noise pollution, etc., caused by excessive noise generated during the operation of the air intake system are thus avoided.

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MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

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本国际公布:
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 进气系统以及空压设备, 所述进气系统包括: 消音通道, 所述消音通道设有进气口; 消音箱, 所述消音箱内形成有间隔开的第一腔和第二腔, 所述第一腔与所述消音通道连通, 所述第一腔内设有空滤结构, 所述空滤结构的进口与所述第一腔连通, 所述空滤结构的出口与所述第二腔连通, 且所述第一腔和所述第二腔中的至少一个构造为消音腔; 连接管组, 所述连接管组与所述第二腔连通, 且用于连通用气部件; 所述进气系统通过设置相连的消音通道以及消音箱, 以对气体进行多次消音, 从而降低进气系统所产生的噪声音量, 避免在进气系统运行时, 产生的噪声过大, 导致噪声污染等问题。